WISCONSIN DEPARTMENT OF PUBLIC INSTRUCTION

2018-19 ACCOUNTABILITY REPORT CARDS

TECHNICAL GUIDE

10/16/2019

Document Control

Document Information

Title	Report Card Technical Guide – 2018-19
Revision	1
Issue Date	10/16/19
Security Level	Public
Filename	Report Card Technical Guide 2018-19_Final_10 16 2019.pdf
Description	Technical documentation updated for 2018-19 Report Cards
Changes	Corrected language on rounding used in Student Engagement Indicator calculations

Using This Document

This document provides descriptions for calculating the scores comprising Wisconsin's Accountability Index, the basis of Wisconsin's Accountability Report Cards. This document focuses on the three school-level report cards and their accompanying School Report Card Detail:

- School Report Card, Private School
- Choice Students Report Card, and Private School
- All Students Report Card

All calculations and descriptions also apply to the District Report Card and District Report Card Detail. Any differences between these report cards are specifically noted.

- Public report cards are available on the Department of Public Instruction's (DPI) website: http://dpi.wi.gov/accountability/report-cards.
- Secure report cards are available to authorized users in SAFE, the Secure Access File Exchange: http://dpi.wi.gov/wisedash/districts/safe.

This document connects the data on the School Report Card Detail to the school's **Overall Score** and corresponding **Accountability Rating**.

You can approximate the calculations used to arrive at a school's Accountability Index scores using data from the **School Report Card Detail** (secure or public) and this document. Scores calculated with this document may not exactly match a school's score due to rounding, both in the calculation itself and in the display of values on the School Report Card Detail.

For further information on reading and interpreting the Accountability Report Cards, or Wisconsin's accountability system, please refer to our resources available here: http://dpi.wi.gov/accountability/resources.

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Introduction

This Technical Guide is meant to provide clarity into the calculations behind the 2018-19 Accountability Report Cards produced by the Wisconsin Department of Public Instruction (DPI). Using the Technical Guide in conjunction with the Report Card Guide will help with understanding and reproducing the scores that are on the report cards. Report cards and related resources can be accessed online: dpi.wi.gov/accountability/report-cards.

The Technical Guide provides a series of explanations and walkthrough examples for each of the four report card Priority Areas (Student Achievement, Growth, Closing Gaps, and On-Track and Postsecondary Readiness) and the two Student Engagement Indicators (Absenteeism and Dropout Rate). This guide assists in understanding public and private school and district report cards. The report cards are designed to reflect the performance of schools and districts regardless of school type—public, charter, choice, or private.

Schools in the Private School Choice Program receive a Private School – Choice Students Report Card that bases scores only upon students attending under the Choice program. These schools may also opt in to receive a Private School – All Students Report Card that scores all students in the school (those attending under the Choice program and private-paying students).

Building the Overall Score

Wisconsin's school accountability system uses multiple measures across four Priority Areas and two expectations of student engagement to build a 0 to 100 point score for each school.

The Overall Score is derived from the Accountability Index, which includes separate scores for each of four Priority Areas—Student Achievement, Growth, Closing Gaps, and On-Track and Postsecondary Readiness—as well as deductions for falling short of statewide goals for the two Student Engagement Indicators: Absenteeism and Dropout Rate.

Like the Overall Score, each of the Priority Areas is scored on a scale from 0 to 100. However, because Wisconsin has schools of many different sizes, grade levels, and student populations, not all of the Priority Areas apply in the same way to every school. Therefore, combining the Priority Area scores to arrive at an overall score is more complicated than taking a straight average. The following pages detail the steps taken to calculate the Overall Score.

Background

The Wisconsin Department of Public Instruction (DPI) bases the process of building a school's Overall Score on three important principles:

1. **We cannot calculate every Priority Area score for every school.** Every component of the Accountability Index requires at least 20 students with data to calculate a score. Some schools are too small to calculate scores for some Priority Areas.
2. **The majority of Wisconsin schools have very high rates of attendance and graduation, the major determinants of the On-Track and Postsecondary Readiness Priority Area score.** Thus, On-Track and Postsecondary Readiness Priority Area scores are typically

much higher than the scores of the other three Priority Areas. Allowing the weight of attendance and graduation to increase for schools and districts where other Priority Areas or components of that Priority Area are missing would create an unfair advantage for those schools and districts.

3. **A school should not be advantaged or disadvantaged by the presence or lack of a Priority Area or component.** Simply averaging the Priority Areas would create a bias for schools with fewer Priority Areas due to the second principle as discussed above. The Report Card attempts to treat all schools fairly, regardless of availability of data.

As a result, an overall score is calculated by considering the following:[1]

1. **The scales of Growth and Closing Gaps scores are aligned with Student Achievement.** Aligning scores to a common scale avoids creating a bias between these Priority Areas.
2. **The Graduation and Attendance components within the On-Track and Postsecondary Readiness Priority Area have a fixed weight no matter how many other Priority Area scores or components are calculated.** Because the attendance and graduation components cause the On-Track and Postsecondary Readiness scores to be typically much higher than the scores of the other Priority Areas, freezing the weight of these components prevents an unfair bias towards schools and districts that lack other Priority Areas, or other components of the On-Track and Postsecondary Readiness Priority Area.

Steps

The process for determining a school's Overall Score consists of calculating a **weighted average Priority Areas score** from the individual Priority Area scores, and then subtracting any applicable **Student Engagement Indicator deductions**. This method also takes into account state statutory requirements for weighting Student Achievement and Growth according to the percentage of students in a school or district who are economically disadvantaged. Note that the Priority Area scores provided on the front page of the report cards do not reflect this variable weighting; they are the raw unweighted scores. Only the overall score incorporates variable weighting.

The steps below show how a school's Overall Score is calculated using individual Priority Area scores and Student Engagement Indicator deductions. Details on how these individual scores are calculated are provided in the sections that follow.

1. **Combine Student Achievement, Growth, and Closing Gaps.** Begin calculating the weighted average Priority Areas score by taking a weighted average of the Student Achievement, Growth, and Closing Gaps scores, weighting Student Achievement and Growth according to the percent of economically disadvantaged students in the school. Note that these score weights may not add up to 1.

   Closing Gaps, when present, is always given a weight of 0.5.

   Weights for Growth and Student Achievement are assigned following the guidelines in state statute, which balance Student Achievement and Growth according to the level of poverty in the school or district:

[1] DPI has an Accountability Report Card Weighting Calculator that shows the weights applied to schools with different data availability and Priority Areas. See: https://oea-dpi.shinyapps.io/overall_weighting_calculator/.

a. If only one of Student Achievement or Growth is present, the Priority Area that is present is given a weight of 0.5.
b. If both Student Achievement and Growth are present, their weights are determined using the following rules:
    i. For a school with 5% or fewer students who are economically disadvantaged, Student Achievement is given a weight of 0.9 and Growth is given a weight of 0.1.
    ii. For a school with 65% or more students who are economically disadvantaged, Student Achievement is given a weight of 0.1 and Growth is given a weight of 0.9.
    iii. For a school with between 5% and 65% students who are economically disadvantaged, the relative weights of Student Achievement and Growth are determined using the following formulas:[2]

Student Achievement Weight

$$= 1 - \left(\left(\frac{4}{3} * \frac{\text{Percent Economically Disadvantaged}}{100}\right) + \frac{1}{30}\right)$$

Growth Weight $= 1 -$ Student Achievement Weight

c. Calculate the weighted average of these Priority Areas using the following formula:

$$\text{Average} = \frac{(\text{Achievement Score}^*\text{Achievement Wt}) + (\text{Growth Score}^*\text{Growth Wt}) + (\text{Closing Gaps Score}^*\text{Closing Gaps Wt})}{\text{Sum of Weights}}$$

2. **Multiply the weighted average by the correct factor.** Next, multiply the weighted average calculated in Step 1 by a factor that is determined by which components of the On-Track and Postsecondary Readiness Priority Area are available for the school:
    a. If a school or district has *either* an attendance or graduation score *and* scores for either the English language arts (ELA) or mathematics academic achievement On-Track components, then the weighted average is multiplied by 3. In cases like this, the maximum score possible for the On-Track Priority Area is 100.
    b. If a school or district has *either* an attendance or graduation score, but no score for the ELA or mathematics achievement On-Track Priority Area components, then the weighted average is multiplied by 3.2. In cases like this, the maximum score possible for the On-Track Priority Area is 80.

3. **Combine Result with On-Track and Postsecondary Readiness Scores.** The next step in creating the Overall Score is to sum the adjusted weighted average of the first three Priority Areas (calculated in step 2) and the On-Track and Postsecondary Readiness score, and then divide this sum by 4.

    Note that the On-Track and Postsecondary Readiness Area Score is presented on the Report Card on a scale where the maximum possible is 100. However, for schools where

[2] DPI has produced an app to show how the weights of Student Achievement and Growth adjust based on the percentage of economically disadvantaged students: https://oea-dpi.shinyapps.io/variable_weighting_app_17/.

the On-Track and Postsecondary Area Score is based solely on the attendance or graduation components, the score incorporated into the Overall Score has a maximum possible score of 80. Therefore, for such schools, the On-Track score listed on the Report Card must be multiplied by 0.80 to arrive at the Overall Score.

4. **Apply Student Engagement Indicator Deductions.** Finally, subtract any Student Engagement Indicator deductions, found on page 1 of the report card, from the weighted average Priority Areas score (from step 3) to arrive at the Overall Score. The maximum possible deduction is 10 points for a school that misses both Student Engagement goals. (See Overall Score Walkthrough, pg. 12.)

The Overall Score determines which Accountability Rating Category for a school or district. Each Accountability Rating Category corresponds to a number of stars.

Accountability Rating Category	*Accountability Score Range*	
	Minimum	*Maximum*
Significantly Exceeds Expectations – ★★★★★	83	100
Exceeds Expectations – ★★★★☆	73	82.9
Meets Expectations – ★★★☆☆	63	72.9
Meets Few Expectations – ★★☆☆☆	53	62.9
Fails to Meet Expectations – ★☆☆☆☆	0	52.9

Exceptions

An Overall Score cannot be calculated for schools in the following situations:

- Schools with fewer than 20 full academic year (FAY) students in WSAS tested grades (Grades 3-11) assessed in the most recent year and the prior academic year
- Schools without tested grades (e.g., K4-2 schools)
- Schools exclusively serving at-risk students
- New schools (those with only one year of data)

In 2011-12 and 2012-13, public schools in these circumstances were given a score of NA and a rating of Not Rated. Beginning in 2013-14, public schools in these situations were scored based on the Alternate Accountability process and received an AR rating of "*Alternate Rating - Satisfactory Progress*" or "*Alternate Rating - Needs Improvement*" based on a district-supervised self-evaluation process. More information about Alternate Accountability can be found online: http://dpi.wi.gov/accountability/alternate-accountability.

In addition to the situations listed above, Choice schools may not meet the requirements for calculating an Overall Score based on the following two scenarios:

1. The school submitted insufficient Choice enrollment data, inhibiting the ability to produce an Overall Score.
2. The school submitted data for only one of the two years required for producing a score. This applies to new Choice schools and Choice schools switching opt-in statuses for the Private School-All Students Report Card.

When a Choice school falls under one of these two scenarios, it is assigned a rating of "NR-DATA."

Global Notes

- The Accountability Index has four Priority Areas and a set of Student Engagement Indicators. Within each Priority Area, individual components are calculated. Example: Student Achievement is a Priority Area; English Language Arts (ELA) Achievement and Mathematics Achievement are two components of this Priority Area, each calculated separately.
- All scores are calculated and reported to one-tenth of a point.
- Calculations are rounded to the third decimal point (0.001, or 0.1%). The only exception is Percent Economically Disadvantaged, which is rounded to the nearest whole percentage point. Rounding is done at two stages in the calculation process: first, when individual student data are aggregated into a rate or average, and second, at the end of a sequence of algebraic operations.
- DPI uses a cell size, the minimum number of students needed to calculate a data component, of 20 students (N=20). In most cases, the cell size is applied to each year of data separately. In the 3rd Grade English Language Arts and 8th Grade Mathematics achievement components of the On-Track and Postsecondary Readiness Priority Area and in the Student Engagement Indicators, the cell size is applied to the two most recent years of data combined. In other words, if a school meets cell size by combining the two most recent years, but would not if not combined, the data from the two most recent years are used in the calculation. This is done to provide a score for as many schools as possible.
- State level comparisons are provided on the front page of the Report Card, based on average state scores from the grade band that most closely matches the school. There are six grade bands for which state average scores are calculated: K-5, 6-8, 9-12, K-8, 6-12, and K-12. Comparison scores treat all Wisconsin students within a particular grade band as if they were one giant school. These scores are calculated using the same methodology as individual school scores. Comparisons are not used to determine a school's score or rating category; they are provided for context only.
- Graduation, attendance, and absenteeism data are from the prior year, not the current year, due to data availability. For example, the most recent graduation, attendance, and absenteeism data used in 2018-19 report cards are from the 2017-18 school year.
- Multiple years of data are considered throughout the Report Card:
    - Student Achievement requires a minimum of two and a maximum of three years of data in both ELA and mathematics
    - Growth requires two consecutive years of assessment data in both ELA and mathematics per student included in the calculation
    - Closing Gaps
        - Closing Achievement Gaps requires a minimum of three years of assessment data and a maximum of five years of data per student group, and both ELA and mathematics scores must be present to receive a Closing Achievement Gaps score
        - Closing Graduation Gaps requires a minimum of three years of graduation data and a maximum of five years of data per student group, and only one of the four-year or extended-year rates is required to receive a Closing Graduation Gaps score
    - On-Track and Postsecondary Readiness requires one of the four-year or extended-year graduation rates to compute a Graduation score; both rates are used when present

    - The Student Engagement Indicators require a current-year rate; when present, a multi-year rate is also considered
- Whether a student attended a school for the Full Academic Year (FAY) is determined differently at the school and district levels. For school report cards, FAY determination is based on FAY for the school, not the district; for district report cards, FAY determination is based on FAY for the district, not the school. For past and current definitions of FAY, please visit: http://dpi.wi.gov/wisedash/help/glossary.
- Whether a student has school FAY status factors into whether he or she is included in report card calculations, as certain Priority Areas and Student Engagement Indicators are meant to capture school performance for students who attend all year. The following table shows when school FAY status determines whether a student is included in a calculation:

School FAY Students Only	All Students (FAY and not FAY)
Student Achievement	Closing Graduation Gaps
Growth	On-Track and Postsecondary Readiness: Graduation Rate
Closing Gaps: ELA and mathematics Achievement Gaps	On-Track and Postsecondary Readiness: Attendance Rate
On-Track and Postsecondary Readiness: 3rd Grade English Language Arts Achievement	Absenteeism Rate
On-Track and Postsecondary Readiness: 8th Grade Mathematics Achievement	Dropout Rate

- Two mobility rates are included on the front page of the district report cards: Within District Mobility and Between District Mobility. Within district mobility is measured as the percentage of students who were FAY in the district but not FAY in a school within the district. Between-district mobility is measured as the percentage of students who were not FAY in the district.

Overall Score Walkthroughs

Below are three walkthroughs using hypothetical school examples to show how the Overall Score is calculated, how those calculations may vary depending on school type (e.g., elementary, middle, high school), and how many Priority Areas or score components are available for the school.

Overall Score weights for Priority Areas and components are dependent upon school characteristics and data availability. Schools/districts can find their weights by using the Report Card Weighting Calculator at https://oea-dpi.shinyapps.io/overall_weighting_calculator/.

Overall Score Walkthrough #1

Sample Elementary School has the following Priority Area scores, and an economically disadvantaged student percentage of 20%:

Priority Area or Component	*Score/Possible*
Student Achievement	71.7 / 100
Growth	59.0 / 100
Closing Gaps	62.4 / 100
On-Track and Postsecondary Readiness	
Attendance	77.6 / 80
3rd Grade English Language Arts	15.5 / 20
Student Engagement Indicators	No deductions

Step 1: Combine Student Achievement, Growth, and Closing Gaps

This school has scores calculated for all three of these Priority Areas. First, determine the weights for each of the three Priority Areas:

Closing Gaps always has a weight of 0.5 when it is present.

Student Achievement Weight (Wt) =

$$1-\left(\left(\frac{4}{3}*\frac{\text{Percent Economically disadvantaged}}{100}\right)+\frac{1}{30}\right)=1-\left(\left(\frac{4}{3}*\frac{20}{100}\right)+\frac{1}{30}\right)=1-0.3=0.7$$

Growth Weight (Wt) =

$$1-\text{Student Achievement Weight}=1-0.7=0.3$$

$$\text{Average}=\frac{(\text{Achievement Score*Achievement Wt})+(\text{Growth Score*Growth Wt})+(\text{Closing Gaps Score*Closing Gaps Wt})}{\text{Sum of Weights}}$$

$$\text{Average}=\frac{(71.7*0.7)+(59.0*0.3)+(62.4*0.5)}{1.5}=66.1$$

Step 2: Multiply the weighted average by the correct factor, determined by the number of On-Track components available

The school also has *either* an attendance or graduation score *and* scores for another On-Track component, so the weighted average is multiplied by 3.

$$\text{Average}*3=66.1*3=\mathbf{198.3}$$

Step 3: Combine Result with On-Track and Postsecondary Readiness Scores

$$\text{Weighted Average Priority Areas Score} = \frac{(\text{Average} * 3) + (\text{Attendance Score} + \text{Other On-Track Scores})}{4}$$

$$\text{Weighted Average Priority Areas Score} = \frac{198.3 + (77.6 + 15.5)}{4} = \mathbf{72.9}$$

Step 4: Apply Student Engagement Indicator Deductions

$$\text{Overall Score} = \text{Weighted Average of Priority Area Scores} - \text{Deductions}$$

$$\text{Overall Score} = 72.9 - 0 = \mathbf{72.9}$$

Sample Elementary School's Overall Score is 72.9. A score of 72.9 means Sample Elementary School gets an Overall Accountability Rating of 3 stars—**Meets Expectations**.

Overall Score Walkthrough #2

Example High School has the following Priority Area scores, and an economically disadvantaged student percentage of 52%:

Priority Area or Component	*Score/Possible*
Student Achievement	56.9 / 100
Growth	41.5 / 100
Closing Gaps	68.2 / 100
On-Track and Postsecondary Readiness Graduation	86 / 100
Student Engagement Indicator Deductions	-5 for Absenteeism

Step 1: Combine Student Achievement, Growth, and Closing Gaps

This school has scores calculated for the Student Achievement, Growth, and Closing Gaps priority areas. First, determine the weights for each of the Priority Areas:

Closing Gaps always has a weight of 0.5 when it is present.

Student Achievement Weight (Wt) =

$$1 - \left(\left(\frac{4}{3} * \frac{\text{Percent Economically disadvantaged}}{100}\right) + \frac{1}{30}\right) = 1 - \left(\left(\frac{4}{3} * \frac{52}{100}\right) + \frac{1}{30}\right)$$

$$= 1 - 0.727 = 0.273$$

Growth Weight (Wt) =

$$1 - \text{Student Achievement Weight} = 1 - 0.273 = 0.727$$

$$\text{Average} = \frac{(\text{Achievement Score}*\text{Achievement Wt}) + (\text{Growth Score}*\text{Growth Wt}) + (\text{Closing Gaps Score}*\text{Closing Gaps Wt})}{\text{Sum of Weights}}$$

$$\text{Average} = \frac{(56.9*0.273) + (41.5*0.727) + (68.2*0.5)}{1.5} = 53.2$$

Step 2: Multiply the weighted average by the correct factor, determined by the number of On-Track components available

The school also has an attendance or graduation score but no scores for other On-Track components, so this average is multiplied by 3.2.

$$\text{Average} * 3.2 = 53.2 * 3.2 = \mathbf{170.2}$$

Step 3: Combine Result with On-Track and Postsecondary Readiness Scores

The school has a maximum graduation score of 100 and no other On-Track and Postsecondary Readiness components, so this score is multiplied by 0.8.

$$\text{Graduation Score} * 0.8 = 86 * 0.8 = \mathbf{68.8}$$

$$\text{Weighted Average Priority Areas Score} = \frac{(\text{Average} * 3.2) + (\text{Graduation Score} * 0.8)}{4}$$

$$\text{Weighted Average Priority Areas Score} = \frac{170.2 + 68.8}{4} = \mathbf{59.8}$$

Step 4: Apply Student Engagement Indicator Deductions

$$\text{Overall Score} = \text{Weighted Average Priority Areas Score} - \text{Deductions}$$

$$\text{Overall Score} = 59.8 - 5 = \mathbf{54.8}$$

Example High School's Overall Score is 54.8, putting it into the **Meets Few Expectations** category.

Overall Score Walkthrough #3

Rural Middle School has the following Priority Area scores, and an economically disadvantaged percent of 35%:

Priority Area or Component	*Score/Possible*
Student Achievement	86.2 / 100
Growth	54.0 / 100
On-Track and Postsecondary Readiness	
Attendance	97.4 / 100
Student Engagement Indicator Deductions	No deductions

It does not have a Closing Gaps score because it is small and none of its student groups has at least 20 students. It does not have any On-Track and Postsecondary Readiness component scores beyond attendance because it is a grade 4-6 school (and thus has no 3rd grade English language arts or 8th grade mathematics data). In this case, where the school has only attendance, we have to transform the attendance score from being out of 100 points to being out of 80 points (as for schools with other components of their On-Track and Postsecondary Readiness scores).

Step 1: Combine Student Achievement, Growth, and Closing Gaps

This school has scores calculated for the Student Achievement and Growth Priority Areas. First, determine the weights for each of the Priority Areas:

Student Achievement Weight =

$$1 - \left(\left(\frac{4}{3} * \frac{\text{Percent Economically disadvantaged}}{100}\right) + \frac{1}{30}\right) = 1 - \left(\left(\frac{4}{3} * \frac{35}{100}\right) + \frac{1}{30}\right) = 1 - 0.5 = 0.5$$

Growth Weight =

$$1 - \text{Student Achievement Weight} = 1 - 0.5 = 0.5$$

$$\text{Average} = \frac{(\text{Student Achievement Score}^* \text{ Student Achievement Weight} + (\text{Growth Score}^* \text{Growth Weight})}{\text{Sum of Weights}}$$

$$\text{Average} = \frac{(86.2^* 0.5) + (54.0^* 0.5)}{1} = 70.1$$

Step 2: Multiply the weighted average by the correct factor, determined by the number of On-Track components available

The school has an attendance score but no scores for other On-Track components, so this average is multiplied by 3.2.

$$\text{Average} * 3.2 = 70.1 * 3.2 = \mathbf{224.3}$$

Step 3: Combine Result with On-Track and Postsecondary Readiness Scores

The school has a maximum attendance score of 100 and no other On-Track and Postsecondary Readiness components, so this score is multiplied by 0.8.

$$\text{Attendance Score} * 0.8 = 97.4 * 0.8 = \mathbf{77.9}$$

$$\text{Weighted Average Priority Areas Score} = \frac{(\text{Average} * 3.2) + (\text{Attendance Score} * 0.8)}{4}$$

$$\text{Weighted Average Priority Areas Score} = \frac{224.3 + 77.9}{4} = \mathbf{75.6}$$

Step 4: Apply Student Engagement Indicator Deductions

$$\text{Overall Score} = \text{Weighted Average Priority Areas Score} - \text{Deductions}$$

$$\text{Overall Score} = 75.6 - 0 = \mathbf{75.6}$$

Rural Middle School's Overall Score is 75.6, putting it into the **Exceeds Expectations** category.

Overall Score Worksheet

Introduction

This worksheet requires that you have calculated scores found in the School Report Card Detail for each of the four Priority Areas that apply to your school. Worksheets for calculating the Priority Areas scores are found later in this guide. The four priority areas that go into determining the Overall Score are:

- Student Achievement: score out of 100 points
- Growth: score out of 100 points
- Closing Gaps: score out of 100 points
- On-Track and Postsecondary Readiness: score out of 100 points

It also requires that you have data on which Student Engagement Indicator deductions, if any, are applied to your school. Once you have calculated the Overall Score, use it to determine the accountability rating.

Accountability Rating Category	*Accountability Score Range*	
	Minimum	*Maximum*
Significantly Exceeds Expectations – ★★★★★	83	100
Exceeds Expectations – ★★★★☆	73	82.9
Meets Expectations – ★★★☆☆	63	72.9
Meets Few Expectations – ★★☆☆☆	53	62.9
Fails to Meet Expectations – ★☆☆☆☆	0	52.9

Worksheet

Step 1: Combine Student Achievement, Growth, and Closing Gaps Priority Areas and Multiply by Correct Factor

Leave a box blank if there is no score to enter.

(1a) Enter the Student Achievement score, if applicable	1a	
(1b) Enter the Growth score, if applicable	1b	
(1c) Enter the Closing Gaps score, if applicable	1c	
(1d) Is 1b blank? 1d ☐ Yes ☐ No If "Yes," skip to 1j.		
(1e) Enter the economically disadvantaged percent	1e	
(1f) Divide 1e by 100		1f
(1g) Multiply 1f by 4/3		1g
(1h) Add 1/30 to 1g		1h
(1i) Subtract 1h from 1		1i
(1j) If 1d is "Yes," enter '0.5' in 1j; otherwise enter '0' in 1j		1j
(1k) If 1c is present, enter '0.5' in 1k; otherwise enter '0' in 1k		1k
(1l) Sum 1h, 1i, 1j, 1k (where present)		1l
(1m) Are 1h and 1i blank? ☐ Yes ☐ No If "Yes," skip to 1p.		
(1n) Multiply 1a by 1i		1n

(1o) Multiply 1b by 1h	1o	
(1p) If 1n and 1o are present, enter '0' in 1p; otherwise multiply 1a by 1j	1p	
(1q) If 1c is present, multiply 1c by 1k; otherwise enter '0' in 1q	1q	
(1r) Sum 1n, 1o, 1p, 1q(where present)		1r
Weighted Average: (1s) Divide 1r by 1l		1s

Step 2: Combine Result with On-Track and Postsecondary Readiness Priority Area

Leave a box blank if there is no score to enter.

(2a) Enter the Attendance or Graduation score, or their sum if both are present	2a		
(2b) If maximum score for Attendance or Graduation is 100, multiply 2a by 0.8; otherwise multiply 2a by 1.0.	2b		
(2c) Enter the 3rd Grade English Language Arts score, if applicable	2c		
(2d) Enter the 8th Grade Mathematics score, if applicable	2d		
(2e) Add 2b through 2d for On-Track score		2e	
(2f) Enter the value from 1s in Step 1	2f		
(2g) If 2c and 2d are *both* blank, enter 3.2; otherwise enter 3	2g		
(2h) Multiply 2f by 2g		2h	
(2i) Add 2e and 2h		2i	
(2j) Weighted average Priority Areas Score: Divide 2i by 4			2j

Step 3: Apply Student Engagement Indicator Deductions

(3a) Enter the Weighted average Priority Areas score from 2j in Step 2	3a
(3b) Did the school's dropout rate meet the goal (<6%)? ☐ Yes ☐ No If "No," enter -5	3b
(3c) Did the school's absenteeism rate meet the goal (<13%)? ☐ Yes ☐ No If "No," enter -5	3c
Overall Score: (3d) Add boxes 3a, 3b, and 3c	3d

Calculating Priority Area Scores
Student Achievement Priority Area

The Student Achievement Priority Area is designed to show **how well the students in a school have learned the knowledge and skills they are supposed to attain**. DPI uses state assessment data over the past three years to build a score, with more recent years bearing more weight on the score. Student Achievement is a points-based measure that gives credit for outcomes at multiple performance levels, with higher levels of performance earning more points.

Background

The simplest way to measure student achievement with state assessment results is by the percentage of students scoring at or above the proficient level. Wisconsin state proficiency level definitions were developed through a detailed process involving educators and testing professionals, and designed to approximate the proficiency benchmarks of the National Assessment of Educational Progress (NAEP) test. Proficiency level definitions were created for each Wisconsin assessment in the state accountability system, including the Forward Exam, DLM, ACT Aspire (new for 2018-19 report cards), and the ACT with Writing, and the prior assessments – the Badger Exam, WKCE and WAA-SwD.

To ensure schools are treated fairly, and to help further differentiate school performance, the Student Achievement measure allows students to earn points for their school based on whether they are partially proficient (Basic), proficient, or perform beyond the proficient threshold (Advanced). Schools earn 0 points for students who are at the Below Basic level.

- Advanced level: **1.5 points**
- Proficient level: **1 point**
- Basic level: **0.5 points**
- Below Basic level: **0 points**

The calculation also incorporates three years of data to account for variation in year-to-year results, weighting the most recent years more heavily.

Reading the Report Card Detail

To arrive at a Student Achievement score, separate component scores for ELA and mathematics are calculated first and then added together. Tables for ELA and mathematics in the student achievement section show the count of students scoring at each performance level over the last three years. Non-tested students and students with invalidated tests are not included in the Student Achievement calculations. Consider the following example data on ELA achievement for a sample school, which will be used throughout this section walkthrough below:

Sample Elementary | Student Achievement – English Language Arts										
Performance Level	Points Multiplier	2016-17			2017-18			2018-19		
		Students		Points	Students		Points	Students		Points
		Count	Percent		Count	Percent		Count	Percent	
Advanced	1.5	22	16.3%	33	22	17.2%	33	21	16.9%	31.5
Proficient	1	35	25.9%	35	34	26.6%	34	41	33.1%	41
Basic	0.5	37	27.4%	18.5	38	29.7%	19	33	26.6%	16.5
Below Basic	0	41	30.4%	0	34	26.6%	0	29	23.4%	0
Total Tested	-	135	100.0%	86.5	128	100.0%	86	124	100.0%	89

This table shows that 135 students with full academic year status were tested at this school two years prior, with 22 scoring Advanced, 35 scoring Proficient, 37 scoring Basic, and 41 scoring Below Basic. Counts for the prior and most recent year are similarly displayed. This table also shows the percent of students scoring in each performance category two years prior, with 16.3% scoring Advanced, 25.9% scoring Proficient, 27.4% scoring Basic, and 30.4% scoring Below Basic. Percentages for the prior and most recent years are similarly displayed. The points and points multipliers for each performance level are also displayed.

Student Achievement Walkthrough

This walkthrough guides the user through the calculation of a Student Achievement score for a single content component (ELA). To determine an overall Student Achievement score, the process is repeated for the other content component (mathematics), and the two component scores are added.

Throughout this walkthrough, we use three terms to describe the year of data used in each step:

- "Prior Year 2" refers to the school year two academic years before the most recent year and is the left-most school year shown on the report card. For the 2018-19 Report Card, it refers to 2016-17.
- "Prior Year 1" refers to the school year one academic year before the most recent year and is the center school year shown on the report card. For the 2018-19 Report Card, it refers to 2017-18.
- "Current Year" refers to the most recent school year of data used in the report cards and is the right-most school year shown on the report card. For the 2018-19 Report Card, it refers to 2018-19.

Step 1: Assign and Average Points

The first step is to assign points for performance levels attained on the content component and calculate the average points per student for each year. Students scoring Advanced are assigned 1.5 points each; students scoring Proficient, 1 point; and students scoring Basic, 0.5 points. Students scoring Below Basic are assigned zero points. These point values are multiplied by the number of students to determine the points awarded in each category. The points for each year are then added together and divided by the total number of students tested to determine an average. Each year's average is capped at a maximum of 1.

Performance Level	Points Multiplier	Prior Year 2			Prior Year 1			Current Year		
		Students		Points	Students		Points	Students		Points
		Count	Percent		Count	Percent		Count	Percent	
Advanced	1.5	22	16.3%	33	22	17.2%	33	21	16.9%	31.5
Proficient	1	35	25.9%	35	34	26.6%	34	41	33.1%	41
Basic	0.5	37	27.4%	18.5	38	29.7%	19	33	26.6%	16.5
Below Basic	0	41	30.4%	0	34	26.6%	0	29	23.4%	0
Total Tested	-	135	100.0%	86.5	128	100.0%	86	124	100.0%	89

Calculation

Calculate proficiency points earned in Prior Year 2. Similar calculations are performed for Prior Year 1 and Current Year.

Points = Points Multiplier * Count

Prior Year 2 Advanced Points = 1.5 * 22 = 33

Prior Year 2 Proficient Points = 1 * 35 = 35

Prior Year 2 Basic Points = 0.5 * 37 = 18.5

Prior Year 2 Below Basic Points = 0 * 41 = 0

Prior Year 2 Points = 33 + 35 + 18.5 + 0 = 86.5

Calculate the average points per student for each year.

Prior Year 2 Average = Prior Year 2 Points / Prior Year 2 Count

Prior Year 1 Average = Prior Year 1 Points / Prior Year 1 Count

Current Year Average = Current Year Points / Current Year Count

Prior Year 2 Average $= 86.5/135 = \mathbf{0.641}$

Prior Year 1 Average $= 86/128 = \mathbf{0.672}$

Current Year Average $= 89/124 = \mathbf{0.718}$

Step 2: Calculate Annual Weights

Next, we calculate a weight for each year's average, which (1) weights more recent years more heavily, and (2) takes into account year-to-year fluctuations in numbers of students tested. These fluctuations are captured by comparing the number of students tested in a given year to the average number tested across three years of data. To do this, we calculate a weight that is the product of a "students tested weight"—that is, the number of students tested that year divided by the average tested across all three years—and a "year weight" that is higher for more recent years.

The values that go into each year's weight depend upon how many years of data are available that meet our cell size (minimum number of students with data) of 20:

- Three years available: "Year weights" are 1.5 for the current year, 1.25 for the prior year, and 1 for the year before that; the number of students tested is averaged across all three years.
- Two years available: "Year weights" are 1.5 for the current year and 1 for the prior year; the number of students tested is averaged across only the current and prior years.
- One year available: *No score.* A minimum of two years available data are required to calculate a Student Achievement score.

Formulas

$$\text{Average Number Tested} = \frac{\text{Prior Year 2 Number Tested + Prior Year 1 Number Tested + Current Year Number Tested}}{\text{Number of Years Available}}$$

$$\text{Prior Year 2 Weight} = 1 * \frac{\text{Prior Year 2 Number Tested}}{\text{Average Number Tested}}$$

$$\text{Prior Year 1 Weight} = 1.25 * \frac{\text{Prior Year 1 Number Tested}}{\text{Average Number Tested}}$$

$$\text{Current Year Weight} = 1.5 * \frac{\text{Current Year Number Tested}}{\text{Average Number Tested}}$$

Calculation

$$\text{Prior Year 2 Weight} = 1 * \frac{135}{(135 + 128 + 124)/3} = \mathbf{1.047}$$

$$\text{Prior Year 1 Weight} = 1.25 * \frac{128}{(135 + 128 + 124)/3} = \mathbf{1.240}$$

$$\text{Current Year Weight} = 1.5 * \frac{124}{(135 + 128 + 124)/3} = \mathbf{1.442}$$

Step 3: Combine Points and Weights

In step three, we multiply the average points determined in Step 1 by the weights calculated in Step 2.

Formulas

$$\text{Prior Year 2 Score} = \text{Prior Year 2 Average} * \text{Prior Year 2 Weight}$$

$$\text{Prior Year 1 Score} = \text{Prior Year 1 Average} * \text{Prior Year 1 Weight}$$

$$\text{Current Year Score} = \text{Current Year Average} * \text{Current Year Weight}$$

Calculation

$$\text{Prior Year 2 Score} = 0.641 * 1.047 = \mathbf{0.671}$$

$$\text{Prior Year 1 Score} = 0.672 * 1.240 = \mathbf{0.833}$$

$$\text{Current Year Score} = 0.718 * 1.442 = \mathbf{1.035}$$

Step 4: Calculate Content Component Score

The achievement score for this content area is calculated by adding the scores from Step 3, dividing the result by the sum of the weights determined in Step 2, and then multiplying the final value by 50. This creates a content area score out of 50 points, which, when combined with the other content component score, will sum to a total Priority Area score out of 100.

Formula

$$\text{Content Area Achievement Score} = \frac{\text{Prior Year 2 Score} + \text{Prior Year 1 Score} + \text{Current Year Score}}{\text{Prior Year 2 Weight} + \text{Prior Year 1 Weight} + \text{Current Year Weight}} * 50$$

Calculation

$$\text{Content Area Achievement Score} = \frac{0.671 + 0.833 + 1.035}{1.047 + 1.240 + 1.442} * 50 = \mathbf{34.0}$$

This school's score for the ELA component of the Student Achievement Area Score is 34.0.

Student Achievement Priority Area Worksheet

Introduction

This worksheet has two parts, one for ELA and one for mathematics. Both parts require you to copy data from the Student Achievement detail page of the School Report Card Detail. Be sure to **use the counts, not the percentages**. Note that **the score calculated here may not exactly match the report card due to rounding differences**. Here is a key to the data needed to complete the worksheet:

Performance Level	Points Multiplier	Prior Year 2			Prior Year 1			Current Year		
		Students			Students			Students		
		Count	Percent	Points	Count	Percent	Points	Count	Percent	Points
Advanced	1.5	22	16.3%	33	22	17.2%	33	21	16.9%	31.5
Proficient	1	35	25.9%	35	34	26.6%	34	41	33.1%	41
Basic	0.5	37	27.4%	18.5	38	29.7%	19	33	26.6%	16.5
Below Basic	0	41	30.4%	0	34	26.6%	0	29	23.4%	0
Total Tested	-	A 35	100.0% B	86.5 C	128	100.0% D	86 E	124	100.0% F	89

Letters shown on the key are used to help identify data on the worksheet. Tables for ELA and mathematics achievement have the same layout.

Instructions

Work through the individual ELA and mathematics worksheets step-by-step, entering data from the Report Card Detail where appropriate. When both are complete, add both content component scores in the space below to determine the school's score for the Student Achievement Priority Area:

English Language Arts Achievement Score: _____ out of 50 points

\+ **Mathematics Achievement Score:** _____ out of 50 points

Student Achievement Priority Area Score: _____ out of 100 points

ELA Achievement Worksheet

Step 1: Assign and Average Points

If a year does not have data shown, leave that year's boxes blank.

Prior Year 2 Average

(1a) Total points earned (B) — 1a
(1b) Count of tested students (A) — 1b
(1c) Is 1a greater than 1b? 1c ☐ Yes ☐ No
Average: (1d) If 1c is "Yes," enter 1; if 1c is "No," divide 1a by 1b — 1d

Prior Year 1 Average

(1e) Total points earned (D) — 1e
(1f) Count of tested students (C) — 1f
(1g) Is 1e greater than 1f? 1g ☐ Yes ☐ No
Average: (1h) If 1g is "Yes," enter 1; if 1g is "No," divide 1e by 1f — 1h

Current Year Average

(1i) Total points earned (F) — 1i
(1j) Count of tested students (E) — 1j
(1k) Is 1i greater than 1j? 1k ☐ Yes ☐ No
Average: (1l) If 1k is "Yes," enter 1; if 1k is "No," divide 1i by 1j — 1l

Step 2: Calculate Annual Weights

Average Number Tested

(2a) Prior Year 2 count of tested students (A) – leave blank if not shown — 2a
(2b) Prior Year 1 count of tested students (C) – leave blank if not shown — 2b
(2c) Current Year count of tested students (E) — 2c
(2d) Add 2a through 2c — 2d
(2e) How many of 2a through 2c have values? — 2e
Average count of tested students: (2f) Divide 2d by 2e — 2f

Prior Year 2 Weight

(2g) Is 2a blank? 2g ☐ Yes ☐ No If "Yes," move on to the "Prior Year 1 Weight" section.
(2h) Enter the count from 2a — 2h
(2i) Enter the average from 2f — 2i
Prior Year 2 Weight: (2j) Divide 2h by 2i — 2j

Prior Year 1 Weight

(2k) Is 2b blank? 2k ☐ Yes ☐ No If "Yes," move on to the "Current Year Weight" section.
(2l) Enter the count from 2b — 2l
(2m) Enter the average from 2f — 2m
(2n) Divide 2l by 2m — 2n
(2o) If 2g is "Yes," enter 1; if 2g is "No," enter 1.25 — 2o
Prior Year 1 Weight: (2p) Multiply 2n by 2o — 2p

Current Year Weight

(2q) Are both 2a and 2b blank? 2q ☐ Yes ☐ No If "Yes," skip to 2t.

(2r) Enter the count from 2c	2r	
(2s) Enter the average from 2f	2s	
(2t) Divide 2q by 2r		2t
(2u) If 2q is "Yes," enter 1; if 2q is "No," enter 1.5		2u
Current Year Weight: (2v) Multiply 2s by 2t		2v

Step 3: Combine Points and Weights

If a year does not have data, leave that year's boxes blank.

Prior Year 2 Score

(3a) Enter the average from 1d	3a	
(3b) Enter the weight from 2j	3b	
Prior Year 2 Score: (3c) Multiply 3a by 3b		3c

Prior Year 1 Score

(3d) Enter the average from 1h	3d	
(3e) Enter the weight from 2p	3e	
Prior Year 1 Score: (3f) Multiply 3d by 3e		3f

Current Year Score

(3g) Enter the average from 1l	3g	
(3h) Enter the weight from 2v	3h	
Current Score: (3i) Multiply 3g by 3h		3i

Step 4: Calculate English Language Arts Achievement Score

(4a) Enter the score from 3c	4a	(4e) Enter the weight from 2j	4e
(4b) Enter the score from 3f	4b	(4f) Enter the weight from 2p	4f
(4c) Enter the score from 3i	4c	(4g) Enter the weight from 2v	4g
(4d) Add 4a through 4c	4d	(4h) Add 4e through 4g	4h
		(4i) Divide 4d by 4h	4i
		ELA Achievement Score: (4j) Multiply 4i by 50	4j

Mathematics Achievement Worksheet

Step 1: Assign and Average Points

If a year does not have data shown, leave that year's boxes blank.

Prior Year 2 Average

(1a) Total points earned (B)	1a	
(1b) Count of tested students (A)	1b	
(1c) Is 1a greater than 1b?	1c ☐ Yes ☐ No	
Average: (1d) If 1c is "Yes," enter 1; if 1c is "No," divide 1a by 1b		1d

Prior Year 1 Average

(1e) Total points earned (D)	1e	
(1f) Count of tested students (C)	1f	
(1g) Is 1e greater than 1f?	1g ☐ Yes ☐ No	
Average: (1h) If 1g is "Yes," enter 1; if 1g is "No," divide 1e by 1f		1h

Current Year Average

(1i) Total points earned (F) 1i

(1j) Count of tested students (E) 1j

(1k) Is 1i greater than 1j? 1k ☐ Yes ☐ No

Average: (1l) If 1k is "Yes," enter 1; if 1k is "No," divide 1i by 1j 1l

Step 2: Calculate Annual Weights

Average Number Tested

(2a) Prior Year 2 count of tested students (A) – leave blank if not shown 2a

(2b) Prior Year 1 count of tested students (C) – leave blank if not shown 2b

(2c) Current Year count of tested students (E) 2c

(2d) Add 2a through 2c 2d

(2e) How many of 2a through 2c have values? 2e

Average count of tested students: (2f) Divide 2d by 2e 2f

Prior Year 2 Weight

(2g) Is 2a blank? 2g ☐ Yes ☐ No If "Yes," move on to the "Prior Year 1 Weight" section.

(2h) Enter the count from 2a 2h

(2i) Enter the average from 2f 2i

Prior Year 2 Weight: (2j) Divide 2h by 2i 2j

Prior Year 1 Weight

(2k) Is 2b blank? 2k ☐ Yes ☐ No If "Yes," move on to the "Current Year Weight" section.

(2l) Enter the count from 2b 2l

(2m) Enter the average from 2f 2m

(2n) Divide 2l by 2m 2n

(2o) If 2g is "Yes," enter 1; if 2g is "No," enter 1.25 2o

Prior Year 1 Weight: (2p) Multiply 2n by 2o 2p

Current Year Weight

(2q) Are both 2a and 2b blank? 2q ☐ Yes ☐ No If "Yes," skip to 2t.

(2r) Enter the count from 2c 2r

(2s) Enter the average from 2f 2s

(2t) Divide 2q by 2r 2t

(2u) If 2q is "Yes," enter 1; if 2q is "No," enter 1.5 2u

Current Year Weight: (2v) Multiply 2s by 2t 2v

Step 3: Combine Points and Weights

If a year does not have data, leave that year's boxes blank.

Prior Year 2 Score

(3a) Enter the average from 1d 3a

(3b) Enter the weight from 2j 3b

Prior Year 2 Score: (3c) Multiply 3a by 3b 3c

Prior Year 1 Score

(3d) Enter the average from 1h 3d

(3e) Enter the weight from 2p 3e

Prior Year 1 Score: (3f) Multiply 3d by 3e 3f

Current Year Score

(3g) Enter the average from 1l	3g		
(3h) Enter the weight from 2v	3h		
Current Score: (3i) Multiply 3g by 3h			3i

Step 4: Calculate Mathematics Achievement Score

(4a) Enter the score from 3c	4a	(4e) Enter the weight from 2j	4e
(4b) Enter the score from 3f	4b	(4f) Enter the weight from 2p	4f
(4c) Enter the score from 3i	4c	(4g) Enter the weight from 2v	4g
(4d) Add 4a through 4c	4d	(4h) Add 4e through 4g	4h
		(4i) Divide 4d by 4h	4i
		Mathematics Achievement Score: (4j) Multiply 4i by 50	4j

Calculating Priority Area Scores
Growth Priority Area

The Growth Priority Area evaluates schools on their **students' growth over time compared to the growth of similar students in other Wisconsin schools.** This measure is designed to provide information on how well schools are contributing to the continued progress of all of their students, regardless of prior achievement level, as opposed to focusing attention on a smaller subset who may be just below proficiency, very low performing, or very high-performing.

Note that the Growth Priority Area is calculated separately for schools and districts; district Growth scores are an average of school Growth scores (see below). This Priority Area is labeled as "School Growth" on school report cards and as "District Growth" on district report cards. For simplicity, the report card documentation refers to this Priority Area collectively as "Growth," distinguishing between "School Growth" and "District Growth" when appropriate. Additionally, on the Private School – Choice Students Report Card, the School Growth Priority Area *only applies* to students attending under the Choice program, not all students in the school.

Background

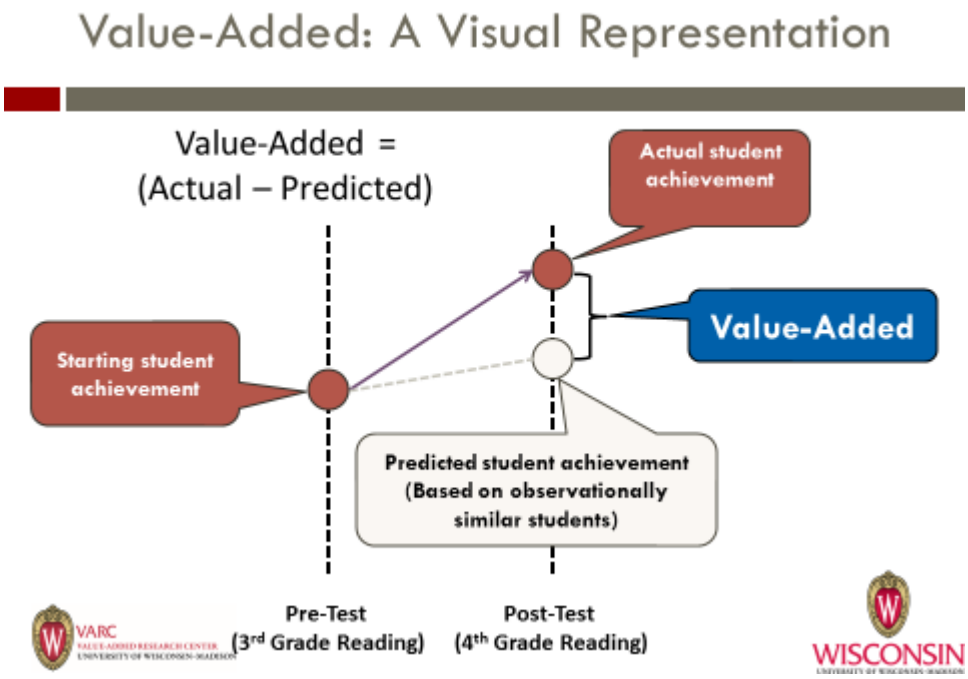
At the foundation of the Growth score is a statistical technique known as value-added, which is used in many states and districts as a measure of school performance. There are different types of value-added measures, each with different technical properties. Value-added measures belong to a class of statistical models that quantify how much growth students make over time after applying statistical controls for factors that are generally beyond a school's control but may influence how much growth students make. These include factors such as students' prior achievement and certain characteristics about the students themselves, such as whether they come from families with lower income levels or have a disability and/or are English learners.

The purpose of statistically controlling for prior achievement and other student attributes is *not* to establish lowered expectations for some students' performance – since high expectations are already reinforced and rewarded through the Student Achievement Priority Area – but rather to recognize the fact that schools often differ substantially with respect to the kinds of students they serve. Some schools' enrollments are comprised largely of students from more affluent families and communities who often enter school with higher levels of achievement and school readiness, while others have higher concentrations of historically marginalized populations, and therefore higher percentages of students who begin schooling with lower levels of readiness. Research accumulated across many years affirms that these kinds of factors often influence the rate at which students grow. It therefore makes sense to include in the report cards not just measures of how well students are performing in an absolute, point-in-time (Student Achievement), but also the rate at which all students, regardless of prior achievement level and background, are growing over time (Growth).

While the calculations behind value-added are complex, the concept is fairly straightforward. Value-added, simply put, is the difference between the *actual* and *predicted* growth over time of students who are "observationally similar." Similar students are determined by prior achievement and a selected set of characteristics about the students themselves that are generally beyond a school's control yet may influence students' growth over time. In addition to prior achievement,

the value-added model used in the Accountability Report Cards (developed at the University of Wisconsin-Madison)[3] includes statistical controls for students' family income status (as measured by free/reduced lunch eligibility), disability status, English language proficiency level, gender, and race/ethnicity. The objective is to facilitate "apples to apples" comparisons between schools that often serve very different student populations, and to include growth across the entire spectrum of student performance, rather than just a subset that moves across proficiency levels.

Value-added starts with one (or more, if available) pre-test scores (such as a 3rd grade ELA score), which are used (in conjunction with student attributes such as family income) to generate predictions based on historical data of how much growth students are likely to make. As soon as a second (post-test) score, such as a 4th grade ELA score, becomes available, the actual scores of students within a school are compared to their predicted scores. If, collectively, the school's actual scores are higher than predicted scores, we call this "high value-added" (meaning that the school produced more growth than schools that serve similar student populations), as depicted below:



In addition to applying statistical controls for students' prior achievement and selected attributes such as family income, the value-added model also includes a statistical correction for measurement error, a common issue in standardized assessments. Measurement error refers to the idea that students' scores on a single administration of a standardized test are not a perfect measure of their true knowledge and ability, and may differ if the same student were to take the same test again. Such variation in scores is especially common when assessment results are very low or very high, but can be statistically adjusted for in the pre-test score to help ensure that

[3] Additional information on the Wisconsin value-added model is available at http://dpi.wi.gov/accountability/report-cards, http://dpi.wi.gov/accountability/growth, and at http://varc.wceruw.org/what-we-do/professional-development.aspx.

schools with large number of low or high-performing students are not penalized in the Growth measure.

Reading the Report Card Detail

To arrive at a Growth score, separate value-added component scores for ELA and mathematics are calculated first by Education Analytics, and then reported to DPI. These value-added scores generally range from 1 to 5, in which a score of 3 is average. While rare, a value-added score can extend below 1 or above 5 when growth is much higher or lower than expected. DPI then converts these scores to Growth scores on a 0- to 100-point scale. The separate component scores are then added together. A table for ELA and mathematics in the Growth section shows the count of students included in Growth calculations and their average value-added score. Consider the following example data on growth for a sample school, which will be used throughout this section walkthrough:

Group	English Language Arts		Mathematics	
	Count	Value-Added Score	Count	Value-Added Score
All Students: School	156	3.0	156	4.1

This table shows that 156 students were included in value-added calculations, with a weighted average value-added score of 3.0 for English language arts and a weighted average value-added score of 4.1 for mathematics.

Note that three years of value-added results are used, when available, in calculating the weighted average value-added scores. As in other parts of the report card, the current year is weighted more heavily than prior years' data:

- Three years available: "Year weights" are 1.5 for growth in the current year, 1 for the prior year, and 0.5 for the year before that; with results averaged across three years.
- Two years available: "Year weights" are 1.5 growth in for the current year, 1 for the prior year; with results averaged across both years.
- One year available: "Year weight" is 1 for growth in the current year.

Growth Walkthrough

This walkthrough guides the user through the calculation of a Growth score.

Step 1: Determine the Growth Score

First, we use a formula to determine the Growth score and put Growth scores on a similar scale to Student Achievement.

Growth Worksheet

Step 1: Calculate the English Language Arts Score

Enter data from the English Language Arts "Value-Added Score" column and the Mathematics "Value-Added Score" column.

Formula

$$\text{Growth Score} = [(\text{Value-Added Score} * 0.19) + 0.09] * \text{Possible Points}$$

Note: 0.19 and 0.09 are numbers that align Growth to a scale based on Student Achievement scores. These numbers were determined from a statistical norming of the Student Achievement, Growth, and Closing Gaps Priority Areas.

Calculation

$$\text{Growth Score} = [(3.0 * 0.19) + 0.09] * 50 = \mathbf{33}.$$

Sample Elementary has a **Growth** score in English language arts of **33.0**.

Growth Priority Area Worksheet

This worksheet has two parts: English Language Arts Growth and Mathematics Growth. Each part requires you to pull data from the Growth detail page in the School Report Card Detail. **Note that the score calculated here may not exactly match the report card due to rounding differences**.

Instructions

Complete the worksheets that include components calculated for the school, entering data from the School Report Card Detail where appropriate. When all applicable worksheets are complete, add the component scores in the space below to determine the school's total Growth score:

	English Language Arts Growth Score:	_____ out of 50 points
+	**Mathematics Growth Score:**	_____ out of 50 points
	Growth Priority Area Score:	_____ out of 100 points

(1a) Enter the English language arts value-added score:	1a
(1b) Multiply 1a by 0.19:	1b
(1c) Add 1b to 0.09:	1c
(1d) **English Language Arts Growth Score** Multiply 1c by 50 possible points:	1d
(2a) Enter the mathematics value-added score:	2a

Step 1: Determine the ELA Growth Score

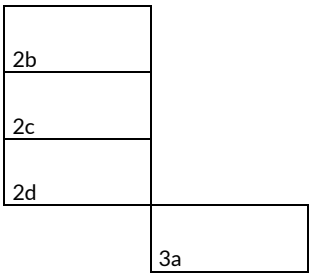
Enter data from the English Language Arts "Value-Added Score" column and the Mathematics "Value-Added Score" column.

(2b) Multiply 2a by 0.19:

(2c) Add 2b to 0.09:

(2d) **Mathematics Growth Score** Multiply 2c by 50 possible points:

(3a) **Growth Score** Add 1d and 2d:



Calculating Priority Area Scores
Closing Gaps Priority Area

The Closing Gaps Priority Area evaluates schools based on the **rate of change in student achievement and graduation over time among key student groups**. It focuses on student groups with statewide achievement gaps, and rewards schools that improve these groups' performance at a rate greater than their statewide comparison group, closing Wisconsin's achievement and graduation gaps.

Background

Wisconsin has a number of specific and significant gaps in ELA and mathematics achievement and in graduation rates. The Closing Gaps Priority Area is designed to **look at improvement among particular student groups** in a way that **rewards schools for contributing to closing these gaps**. We evaluate schools' progress in closing achievement gaps using the points-based proficiency rate also used in the Student Achievement Priority Area, and we evaluate schools' progress in closing graduation gaps using high school cohort graduation rates. For each of these components, we examine the change in the points-based proficiency or graduation rate over a number of years (up to a maximum of five years). Then, each school's average rate of change for a subgroup is contrasted with a statewide comparison group's average rate of change over the same time. The statewide comparison group consists of public school students and Choice students. This is done by comparing the trend lines of the two groups. The school target groups and statewide comparison groups included in Closing Gaps scores are:

School Target Group	Statewide Comparison Group
American Indian or Alaskan Native	White
Asian	
Black or African American	
Hispanic/Latino	
Native Hawaiian or other Pacific Islander	
Two or more races	
Students with disabilities	Students without disabilities
Economically disadvantaged	Not economically disadvantaged
English learners	English proficient
Supergroup*	Not in supergroup*

*Definition of supergroup detailed below.

Supergroups

In some instances, a school's non-racial subgroups (SwD, EL, and ECD) may not meet the group size requirement (N=20) for calculating a Closing Gaps score. If this is the case, a supergroup is formed by combining at least two of these three groups so that the group size requirement is met. Schools with enough students for a SwD, EL, or ECD score do not have a supergroup that includes that group. Students are not counted more than once in a single supergroup.

There are four possible supergroups: the "SwD-ECD" supergroup, "SwD-EL" supergroup, "ECD-EL" supergroup, and "All 3" supergroup. Each supergroup is compared to the statewide group of students who would not meet any of the conditions for being in the particular supergroup.

School Target Group	Statewide Comparison Group
"All 3" Supergroup	Students who are not SwD, EL, or ECD
"SwD-ECD" Supergroup	Students who are not SwD or ECD
"SwD-EL" Supergroup	Students who are not SwD or EL
"ECD-EL" Supergroup	Students who are not ECD or EL

For example, consider a school with 14 students with disabilities, 21 English learners (EL), and 16 economically disadvantaged students. The school meets the group size requirement for EL students; however, there are too few SwD and ECD students for each group to be considered separately in Closing Gaps. However, if there are 25 students in the "SwD-ECD" supergroup (9 with disabilities, 11 economically disadvantaged, and 5 in both groups), then we can consider all of those students together in the supergroup. This supergroup would be compared to students statewide who are without disabilities and are not economically disadvantaged.

Reading the Report Card Detail

All of the Closing Gaps measures are based on comparisons between specific groups of students in the school and their peers in a statewide comparison group. The Closing Gaps score is based on student subgroups, not the "all students" group:

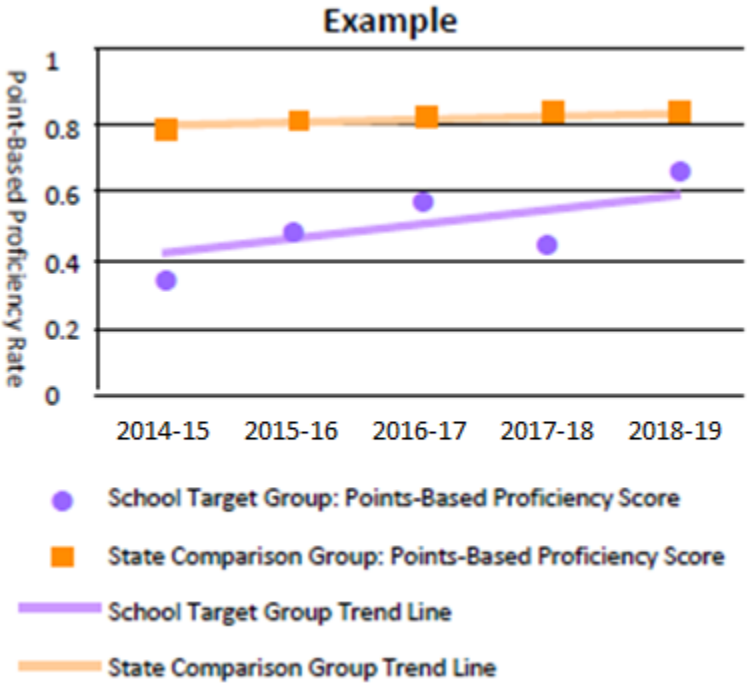
- For racial/ethnic groups, we compare each targeted racial/ethnic group--American Indian or Alaskan Native, Asian, Black or African American, Hispanic/Latino, Native Hawaiian or other Pacific Islander, and two or more race students--to their White student counterparts across the state.
- For the students with disabilities, economically disadvantaged, and English learner groups,--we compare the students within the group at the school level to those outside of it at the state level. A student may be counted in more than one of these groups.
- For supergroups (groups combining two or three groups outside of racial/ethnic group, used only when those individual groups do not have enough students for comparison but the supergroup does), we compare the students within the supergroup to students statewide who do not meet any of the requirements for being in the supergroup. A student belonging to more than one of the combined groups is only counted once in the supergroup.
- If a school (or district) has a very high performing subgroup—a subgroup with an average points-based proficiency rate or graduation rate that is greater than or equal to 0.9—the subgroup is awarded the difference in rate of change that equates to earning full points (for that subgroup alone). This is indicated on the report cards by the symbol "!". This accounts for the fact that schools with a high performing group have less room for growth from one year to the next, so assigning them the highest score for that subgroup ensures they are not unfairly penalized.

DPI requires a minimum of 20 students in a group per year for a minimum of three years to complete Closing Gaps calculations. In other words, at a minimum, a school's student group must have achievement or graduation data for the current year and the two most recent years to be included in the calculation. A school must have at least one student group or supergroup that meets these requirements in order to have a Closing Gaps score. "NA" is reported when student groups do not meet the minimum number of students for the minimum number of years.

The Closing Gaps data in the School Report Card Detail includes summary tables for Closing Achievement Gaps (one for English language arts and one for mathematics) and Closing Graduation Gaps (one for the four-year cohort graduation rate and one for the six-year cohort graduation rate). For Closing Achievement Gaps, each table includes five points-based proficiency rate columns, representing the five most recent years and labeled "Points," for both the school target groups and the state comparison groups. Points-based proficiency is calculated using the same method as is used for the Student Achievement Priority Area. The Closing Graduation Gaps tables are similar but show graduation rates in place of points-based proficiency rates. Consider the following example table for Closing Achievement Gaps:

School Target Group Points-Based Proficiency Rates						State Comparison Group Points-Based Proficiency Rates						Rate of Change		
Group	2014-15 Points	2015-16 Points	2016-17 Points	2017-18 Points	2018-19 Points	Group	2014-15 Points	2015-16 Points	2016-17 Points	2017-18 Points	2018-19 Points	School Target Group	State Comparison Group	Difference in Rate of Change
Example School Target Group	0.351	0.480	0.593	0.452	0.678	Example State Comparison Group	0.793	0.811	0.825	0.843	0.846	0.201	0.050	0.151

Each points-based proficiency column is treated as a point on a scatterplot. A line of best fit is drawn through these points to create a trend line that gives more weight to years with more tested students. The slope of this line is a group's Rate of Change, representing the progress made by the group over time. Rates of change may be positive or negative, depending on whether a group's achievement scores or graduation rate are improving over time. Rate of Change values closer to 0 suggest little change over time, while those farther from 0 indicate more change. Finally, the table includes a column for the Difference in Rate of Change, showing the difference in the Rate of Change between the target group and the comparison group. A positive number means that the gap is decreasing (i.e., the Rate of Change of the target group is higher than that of the comparison group); a negative number means that the gap is increasing.



The Report Card Detail contains four tables (Closing Achievement Gaps – English Language Arts, Closing Achievement Gaps – Mathematics, Closing Graduation Gaps – Four Year, Closing Graduation Gaps – Six Year) that contain one row per target group. Below are example tables for Closing Achievement Gaps – English Language Arts and Closing Graduation Gaps – Four Year:

Closing Achievement Gaps - English Language Arts | Score: 30.8/50

School Target Group Points-Based Proficiency Rates						State Comparison Group Points-Based Proficiency Rates						Rate of Change		
Group	2014-15 Points	2015-16 Points	2016-17 Points	2017-18 Points	2018-19 Points	Group	2014-15 Points	2015-16 Points	2016-17 Points	2017-18 Points	2018-19 Points	School Target Group	State Comparison Group	Difference in Rate of Change
American Indian or Alaskan Native	0.433	0.468	0.513	0.446	0.435	White	0.657	0.658	0.826	0.723	0.741	-0.002	0.023	-0.025
Asian	0.470	0.515	0.711	0.657	0.547							0.031		0.008
Black or African American	0.420	0.382	0.478	0.466	0.344							-0.006		-0.029
Hispanic/Latino	0.388	0.377	0.506	0.478	0.438							0.019		-0.004
Native Hawaiian or Pacific Islander	NA	NA	NA	NA	NA							NA		NA
Two or More Races	NA	NA	0.741	0.652	0.625							-0.055		-0.078
Students with Disabilities	0.219	0.248	0.333	0.304	0.284	Students without Disabilities	0.634	0.634	0.801	0.693	0.709	0.019	0.021	-0.002
Economically Disadvantaged	0.460	0.456	0.600	0.515	0.462	Not Economically Disadvantaged	0.705	0.710	0.877	0.769	0.784	0.006	0.022	-0.016
English Learners	0.290	0.296	0.393	0.337	0.219	English Proficient	0.610	0.609	0.767	0.662	0.675	-0.010	0.018	-0.028
"All 3" Supergroup	NA	NA	NA	NA	NA	Not in "All 3" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-ECD" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-ECD" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"ECD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "ECD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA

Closing Graduation Gaps - Four Year | Score: 11.5/25

School Target Group Graduation Rates						State Comparison Group Graduation Rates						Rate of Change		
Group	2013-14 Graduation Rate	2014-15 Graduation Rate	2015-16 Graduation Rate	2016-17 Graduation Rate	2017-18 Graduation Rate	Group	2013-14 Graduation Rate	2014-15 Graduation Rate	2015-16 Graduation Rate	2016-17 Graduation Rate	2017-18 Graduation Rate	School Target Group	State Comparison Group	Difference in Rate of Change
American Indian or Alaskan Native	NA	NA	NA	NA	NA	White	NA	NA	NA	NA	NA	NA	NA	NA
Asian	NA	NA	NA	NA	NA							NA		NA
Black or African American	NA	NA	NA	NA	NA							NA		NA
Hispanic/Latino	NA	NA	NA	NA	NA							NA		NA
Native Hawaiian or Pacific Islander	NA	NA	NA	NA	NA							NA		NA
Two or More Races	NA	NA	NA	NA	NA							NA		NA
Students with Disabilities	NA	NA	NA	NA	NA	Students without Disabilities	NA	NA	NA	NA	NA	NA	NA	NA
Economically Disadvantaged	NA	NA	NA	NA	NA	Not Economically Disadvantaged	NA	NA	NA	NA	NA	NA	NA	NA
English Learners	NA	NA	NA	NA	NA	English Proficient	NA	NA	NA	NA	NA	NA	NA	NA
"All 3" Supergroup	0.933	0.870	0.906	0.958	0.758	Not in "All 3" Supergroup	0.948	0.950	0.956	0.957	0.947	-0.031	0.001	-0.032
"SwD-ECD" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-ECD" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"ECD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "ECD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA

Closing Gaps Walkthrough

This walkthrough guides the user through calculation of a Closing Achievement Gaps score in ELA for Sample Elementary. It also includes a shorter description of a Closing Graduation Gaps determination for Sample High, illustrating how graduation differs in this Priority Area. To determine an overall Closing Gaps score, ELA, mathematics, and graduation scores are calculated as applicable and added.

English Language Arts Achievement Gaps Example

Step 1: Calculate the Difference in Rates of Change for Each Target Group-Comparison Pair

Closing Achievement Gaps calculations are based on achievement performance level points like those of the Student Achievement Priority Area.

The first step in determining a Closing Achievement Gaps score is to subtract the state comparison group Rate of Change from the school target group Rate of Change for each student subgroup to determine that subgroup's Difference in Rate of Change:

$$\text{Difference in Rate of Change} = \text{School Target Group Rate of Change} - \text{State Comparison Group Rate of Change}$$

We will walk through the process to illustrate using Sample Elementary School's data.

Sample Elementary – English Language Arts Achievement

Closing Achievement Gaps - English Language Arts | Score: 32.6/50

School Target Group Points-Based Proficiency Rates						State Comparison Group Points-Based Proficiency Rates						Rate of Change		
Group	2014-15 Points	2015-16 Points	2016-17 Points	2017-18 Points	2018-19 Points	Group	2014-15 Points	2015-16 Points	2016-17 Points	2017-18 Points	2018-19 Points	School Target Group	State Comparison Group	Difference in Rate of Change
American Indian or Alaskan Native	0.433	0.468	0.513	0.446	0.435	White	0.657	0.658	0.826	0.723	0.741	-0.002	0.023	-0.025
Asian	0.470	0.515	0.711	0.657	0.547		0.657	0.658	0.826	0.723	0.741	0.031	0.023	0.008
Black or African American	0.420	0.382	0.478	0.466	0.344		0.657	0.658	0.826	0.723	0.741	-0.006	0.023	-0.029
Hispanic/Latino	0.388	0.377	0.506	0.478	0.438		0.657	0.658	0.826	0.723	0.741	0.019	0.023	-0.004
Native Hawaiian or Pacific Islander	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA
Two or More Races	NA	NA	0.741	0.652	0.625		NA	NA	0.826	0.723	0.741	-0.055	-0.043	-0.012
Students with Disabilities	0.219	0.248	0.333	0.304	0.284	Students without Disabilities	0.634	0.634	0.801	0.693	0.709	0.019	0.021	-0.002
Economically Disadvantaged	0.460	0.456	0.600	0.515	0.462	Not Economically Disadvantaged	0.705	0.710	0.877	0.769	0.785	0.006	0.022	-0.016
English Learners	0.290	0.296	0.393	0.337	0.219	English Proficient	0.610	0.609	0.767	0.662	0.675	-0.010	0.018	-0.028
"All 3" Supergroup	NA	NA	NA	NA	NA	Not in "All 3" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-ECD" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-ECD" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"ECD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "ECD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA

Difference in Rate of Change
= School Target Group Rate of Change - State Comparison Group Rate of Change

The Rate of Change calculations for Sample Elementary are below:

Amer Indian students: Difference in Rate of Change $= -0.002 - 0.023 = -0.025$
Asian students: Difference in Rate of Change $= 0.031 - 0.023 = 0.008$
Black students: Difference in Rate of Change $= -0.006 - 0.023 = -0.029$
Hispanic students: Difference in Rate of Change $= 0.019 - 0.023 = -0.004$
Two or More Races students: Difference in Rate of Change $= -0.055 - (-0.043) = -0.012$
Students with Disabilities: Difference in Rate of Change $= 0.019 - 0.021 = -0.002$
Economically Disadvantaged students: Difference in Rate of Change $= 0.006 - 0.022 = -0.016$
English Learner students: Difference in Rate of Change $= -0.010 - 0.018 = -0.028$

Step 2: Determine the Closing Achievement Gaps Score

Once we have a Difference in Rate of Change for each group-comparison pair in the school, we average those scores together and use a formula to determine the Closing Achievement Gaps score, in order to put Closing Gaps scores on a similar scale to Student Achievement.

Definitions

Average Difference in Rate of Change
= Average of all "Difference in Rate of Change" values calculated for the school

$$\text{Possible Points} = 25 \text{ points each for ELA and mathematics if the school has Closing Graduation Gaps data}$$

$$\text{or } 50 \text{ each if it does not}$$

Formula

$$\text{Closing Achievement Gaps Score} = [(\text{Average Difference in Rate of Change} * 4.77) + 0.72] * \text{Possible Points}$$

Note: 4.77 and -0.72 are numbers that align Closing Gaps to a scale based on Student Achievement scores. These numbers were determined from statistical norming of the Student Achievement, Growth, and Closing Gaps Priority Areas.

Calculation

$$\text{Average Change Score} = \frac{-0.025 + 0.008 + (-0.029) + (-0.004) + (-0.012) + (-0.002) + (-0.016) + (-0.028)}{8}$$

$$= -0.0135$$

$$\text{Possible Points} = 50$$

$$\text{Closing Achievement Gaps Score} = [(-0.0135 * 4.77) + 0.72] * 50 = 32.8$$

Sample Elementary has a **Closing Achievement Gaps** score in English language arts of 32.8.
(The score of 32.6 for Sample Elementary is caused by rounding differences in the index.)

Closing Graduation Gaps Example

The process for calculating a Closing Graduation Gaps score is similar to that for achievement gaps, with some differences:

1. "Students in Cohort" takes the place of "Students Tested."
2. "Graduation Rates" take the place of "Points-Based Proficiency Rates."
3. The 4-year and 6-year Closing Graduation Gap cohort scores are calculated separately. Each is calculated as the average difference in rate of change for subgroups in that cohort.
4. The Graduation Rate Gaps score is the sum of the Closing Graduation Gaps – 4-Year Cohort score and the Closing Graduation Gaps – 6-Year Cohort score. If only one cohort score is available, the Closing Graduation Gaps score is equal to that cohort score.
5. The number of possible points is 50 if the school has Closing Achievement Gaps data described above, or 100 if it does not. The numbers in the score formula used to align Closing Graduation Gaps to Student Achievement are different. These numbers were determined from statistical norming of the Student Achievement, Growth, and Closing Gaps Priority Areas.

$$\text{Graduation Rate Gaps Score} = \text{Closing Graduation Gaps Four Year Score} + \text{Closing Graduation Gaps Six Year Score}$$

4-year graduation rates for Choice schools will be calculated beginning with the 2019-20 Report Card. Closing Graduation Gaps scores will therefore be "NA" on both versions of the Private School report cards.

We will step through the process to illustrate using Sample High School data.

Step 1: Calculate the Difference in Rates of Change for Each Target Group-Comparison Pair

Closing Graduation Gaps - Four Year | Score: 13.6/25

School Target Group Graduation Rates						State Comparison Group Graduation Rates						Rate of Change		
Group	2013-14 Graduation Rate	2014-15 Graduation Rate	2015-16 Graduation Rate	2016-17 Graduation Rate	2017-18 Graduation Rate	Group	2013-14 Graduation Rate	2014-15 Graduation Rate	2015-16 Graduation Rate	2016-17 Graduation Rate	2017-18 Graduation Rate	School Target Group	State Comparison Group	Difference in Rate of Change
American Indian or Alaskan Native	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA
Asian	0.894	0.868	0.761	0.778	0.952		0.923	0.925	0.929	0.931	0.928	-0.009	0.002	-0.011
Black or African American	NA	0.714	0.378	0.826	0.679		NA	0.925	0.929	0.931	0.928	0.029	0.001	0.028
Hispanic/Latino	0.625	0.893	0.600	0.622	0.750	White	0.923	0.925	0.929	0.931	0.928	-0.002	0.002	-0.004
Native Hawaiian or Pacific Islander	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA
Two or More Races	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA	NA
Students with Disabilities	0.673	0.755	0.611	0.727	0.625	Students without Disabilities	0.904	0.905	0.912	0.914	0.910	-0.010	0.002	-0.012
Economically Disadvantaged	0.747	0.774	0.592	0.734	0.715	Not Economically Disadvantaged	0.931	0.932	0.939	0.940	0.936	-0.010	0.002	-0.012
English Learners	NA	NA	NA	NA	NA	English Proficient	NA	NA	NA	NA	NA	NA	NA	NA
"All 3" Supergroup	NA	NA	NA	NA	NA	Not in "All 3" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-ECD" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-ECD" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"SwD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "SwD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA
"ECD-LEP" Supergroup	NA	NA	NA	NA	NA	Not in "ECD-LEP" Supergroup	NA	NA	NA	NA	NA	NA	NA	NA

Difference in Rate of Change
= School Target Group Rate of Change - State Comparison Group Rate of Change

Asian students: Difference in Rate of Change $= -0.009 - 0.002 = -0.011$
Black students: Difference in Rate of Change $= 0.029 - 0.001 = 0.028$
Hispanic students: Difference in Rate of Change $= -0.002 - 0.002 = -0.004$
Students with Disabilities: Difference in Rate of Change $= -0.010 - 0.002 = -0.012$
Economically Disadvantaged students: Difference in Rate of Change $= -0.010 - 0.002 = -0.012$

Step 2: Determine the Closing Graduation Gaps Score

Once we have a Difference in Rate of Change score for each group-comparison pair in the school, we average the raw scores together and use a formula to determine the Closing Graduation Gaps score in order to put Closing Gaps scores on the same scale as Student Achievement.

Definitions

Average Change Score = Average of all change scores calculated for the school

Possible Points	If the school has the following data:
25	Closing Graduation Gaps—Four Year AND Closing Graduation Gaps—Six Year AND Achievement Gaps
50	Closing Graduation Gaps—Four Year OR Closing Graduation Gaps—Six Year AND Achievement Gaps
100	Closing Graduation Gaps—Four Year OR Closing Graduation Gaps—Six Year

Formula

$$\text{Closing Graduation Gaps - Four Year Score} = [(\text{Average Change Score} * 2.82) + 0.55] * \text{Possible Points}$$

Note: 2.82 and 0.55 are numbers that align Closing Gaps scores to a scale based on the Student Achievement Priority Area. These numbers were determined from statistical modeling of the Student Achievement, Growth, and Closing Gaps Priority Areas.

Calculation

$$\text{Average Change Score} = \frac{-0.011 + 0.028 + (-0.004) + (-0.012) + (-0.012)}{5} = -0.0022$$

$$\text{Possible Points} = 25$$

$$\text{Closing Graduation Gaps Score} = [(-0.0022 * 2.82) + 0.55] * 25 = \mathbf{13.6}$$

Sample High has a Closing Graduation Gaps – Four Year Score of 13.6.

Step 3: Combine the Closing Graduation Gaps – Four Year Score and Closing Graduation Gaps – Six Year Score

If a school has both a Closing Graduation Gaps – Four Year and a Closing Graduation Gaps – Six Year score then they need to be added together to create an overall Closing Graduation Gaps score.

Formula

$$\text{Closing Graduation Gaps Score} = \text{Closing Graduation Gaps-Four Year Score + Closing Graduation Gaps-Six Year Score}$$

Calculation

Note that the calculations to arrive at a Closing Graduation Gaps – Six Year Score of 14.2 are not shown in this document as they are the same as the calculations used for the Closing Graduation Gaps – Four Year Score.

$$\text{Closing Graduation Gaps Score} = 13.6 + 14.2 = 27.8$$

Sample High has a Closing Graduation Gaps Score of 27.8.

Closing Gaps Priority Area Worksheet

This worksheet has four parts: Closing English Language Arts Achievement Gaps, Closing Mathematics Achievement Gaps, and Closing Graduation Gaps – Four Year, and Closing Graduation Gaps – Six Year. Each part requires you to pull data from the Closing Gaps detail in the School Report Card Detail. **Note that the score calculated here may not exactly match the report card due to rounding differences**. The Report Card Detail for a particular school will include some or all Closing Gaps data:

- Closing English Language Arts Achievement Gaps and Closing Mathematics Achievement Gaps only
- Closing Graduation Gaps – Four Year only
- Closing Graduation Gaps – Six Year only
- Some combination of the above achievement and graduation components

A school will not have Closing Achievement Gaps data and scores reported unless they are available for both ELA and mathematics. The combination of Closing Gaps components calculated and reported for a school determines the number of possible points for each component, as shown in the table below:

	Scenario 1 Achievement Only		**Scenario 2** Graduation – Four Year Only		**Scenario 3** Graduation – Six Year Only		**Scenario 4** Both Graduation		**Scenario 5** Achievement and Graduation	
Component	**Present?**	**Possible points**	**Present?**	**Possible points**	**Present?**	**Possible points**	**Present?**	**Possible Points**	**Present?**	**Possible points**
Closing English Language Arts Achievement Gaps	Yes	50	No	-	No	-	No	-	Yes	25
Closing Mathematics Achievement Gaps	Yes	50	No	-	No	-	No	-	Yes	25
Closing Graduation Gaps – Four Year	No	-	Yes	100	No	-	Yes	50	Yes	25
Closing Graduation Gaps – Six Year	No	-	No	-	Yes	100	Yes	50	Yes	25

Closing English Language Arts Achievement Gaps Worksheet

	Scenario 6 Achievement and Graduation – Four Year		Scenario 7 Achievement and Graduation – Six Year	
Component	**Present?**	**Possible points**	**Present?**	**Possible points**
Closing English Language Arts Achievement Gaps	Yes	25	Yes	25
Closing Mathematics Achievement Gaps	Yes	25	Yes	25
Closing Graduation Gaps – Four Year	Yes	50	No	-
Closing Graduation Gaps – Six Year	No	-	Yes	50

Instructions

Complete the worksheets that include components calculated for the school, entering data from the School Report Card Detail where appropriate. When all applicable worksheets are complete, add the component scores in the space below to determine the school's total Closing Gaps score:

	Closing English Language Arts Achievement Gaps Score:	_____ out of ____ points
	Closing Mathematics Achievement Gaps Score:	_____ out of ____ points
	Closing Graduation Gaps – Four Year Score:	_____ out of ____ points
+	**Closing Graduation Gaps – Six Year Score:**	_____ out of ____ points
	Closing Gaps Priority Area Score:	_____ out of 100 points

Step 1: Calculate the Difference in Rate of Change for Each Target Group – Comparison Pair

Enter data from the Closing Achievement Gaps - English Language Arts "Rate of Change" columns under the "School Target Group" and "State Comparison Group" headings in the Report Card Detail table. If "NA" is given for a particular pair of target and comparison groups, leave the boxes blank for that pair.

Subtract the state comparison from the school target group in Points-Based Proficiency Rate to determine the difference in rate of change.

		Rate of Change			
School Target Group	State Comparison Group	School Target Group	State Comparison Group		Difference in Rate of Change
American Indian or Alaskan Native	White	1a	2a	1a-2a:	3a
Asian	White	1b	2b	1b-2b:	3b
Black or African American	White	1c	2c	1c-2c:	3c
Hispanic/Latino	White	1d	2d	1d-2d:	3d
Native Hawaiian or other Pacific Islander	White	1e	2e	1e-2e:	3e
Two or more races	White	1f	2f	1f-2f:	3f
Students with Disabilities	Students without Disabilities	1g	2g	1g-2g:	3g
Economically Disadvantaged	Not Economically Disadvantaged	1h	2h	1h-2h:	3h
English Learner	English Proficient	1i	2i	1i-2i:	3i
"All 3" Supergroup	Not in "All 3" Supergroup	1j	2j	1j-2j:	3j
"SwD-ECD" Supergroup	Not in "SwD-ECD" Supergroup	1k	2k	1k-2k:	3k
"SwD-EL" Supergroup	Not in "SwD-EL" Supergroup	1l	2l	1l-2l:	3l
"ECD-EL" Supergroup	Not in "ECD-EL" Supergroup	1m	2m	1m-2m:	3m

Step 2: Determine the Closing English Language Arts Achievement Gaps Score

(4a) Count number of non-blank Difference in Rate of Change values (in Step 1: 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k, 3l, 3m)	4a
(4b) Sum the Change Scores (from Step 1: 3a+3b+3c+3d+3e+3f+3g+3h+3i+3j+3k+3l+3m)	4b
(4c) Determine the Average Change Score (4b/4a)	4c

(4d) Does the school have Closing Graduation Gaps data? 4d ☐ Yes ☐ No

Possible Points: (4e) If 4d is "Yes," enter 25; if "No," enter 50: 4e

(4f) Enter Average Change Score from 4c:	4f
(4g) Multiply 4f by 4.77:	4g
(4h) Add 4g to 0.72:	4h
(4i) Enter Possible Points from 4e:	4i

(4j) Closing English Language Arts Achievement Gaps Score
Multiply 4h and 4i: **4j**

Closing Mathematics Achievement Gaps Worksheet

Step 1: Calculate the Difference in Rate of Change for Each Target Group – Comparison Pair

Enter data from the Closing Achievement Gaps - Mathematics "Rate of Change" columns under the "School Target Group" and "State Comparison Group" headings in the Report Card Detail table. If "NA" is given for a particular pair of target and comparison groups, leave the boxes blank for that pair.

Subtract the state comparison from the school target group in Points-Based Proficiency Rate to determine the difference in rate of change.

		Rate of Change			
School Target Group	State Comparison Group	School Target Group	State Comparison Group		Difference in Rate of Change
American Indian or Alaskan Native	White	1a	2a	1a-2a:	3a
Asian	White	1b	2b	1b-2b:	3b
Black or African American	White	1c	2c	1c-2c:	3c
Hispanic/Latino	White	1d	2d	1d-2d:	3d
Native Hawaiian or other Pacific Islander	White	1e	2e	1e-2e:	3e
Two or more races	White	1f	2f	1f-2f:	3f
Students with Disabilities	Students without Disabilities	1g	2g	1g-2g:	3g
Economically Disadvantaged	Not Economically Disadvantaged	1h	2h	1h-2h:	3h
English Learner	English Proficient	1i	2i	1i-2i:	3i
"All 3" Supergroup	Not in "All 3" Supergroup	1j	2j	1j-2j:	3j
"SwD-ECD" Supergroup	Not in "SwD-ECD" Supergroup	1k	2k	1k-2k:	3k
"SwD-EL" Supergroup	Not in "SwD-EL" Supergroup	1l	2l	1l-2l:	3l
"ECD-EL" Supergroup	Not in "ECD-EL" Supergroup	1m	2m	1m-2m:	3m

Step 2: Determine the Closing Mathematics Achievement Gaps Score

(4a) Count number of non-blank Difference in Rate of Change values (in Step 1: 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k, 3l, 3m)	4a
(4b) Sum the Change Scores (from Step 1: 3a+3b+3c+3d+3e+3f+3g+3h+3i+3j+3k+3l+3m)	4b
(4c) Determine the Average Change Score (4b/4a)	4c
(4d) Does the school have Closing Graduation Gaps data?	4d ☐ Yes ☐ No
Possible Points: (4e) If 4d is "Yes," enter 25; if "No," enter 50:	4e
(4f) Enter Average Change Score from 4c:	4f
(4g) Multiply 4f by 4.77:	4g
(4h) Add 4g to 0.72:	4h
(4i) Enter Possible Points from 6e:	4i
(4j) Closing Mathematics Achievement Gaps Score: Multiply 4h and 4i:	**4j**

Closing Graduation Gaps Worksheet

Step 1: Calculate the Difference in Rate of Change for the Four Year Rate for Each Target Group – Comparison Pair

Enter data from the Closing Graduation Gaps – Four Year "Rate of Change" columns under the "School Target Group" and "State Comparison Group" headings in the Report Card Detail table. If "NA" is given for a particular pair of target and comparison groups, leave the boxes blank for that pair.

Subtract the state comparison from the school target group in Points-Based Proficiency Rate to determine the difference in rate of change.

		Rate of Change			
School Target Group	State Comparison Group	School Target Group	State Comparison Group		Difference in Rate of Change
American Indian or Alaskan Native	White	1a	2a	1a-2a:	3a
Asian	White	1b	2b	1b-2b:	3b
Black or African American	White	1c	2c	1c-2c:	3c
Hispanic/Latino	White	1d	2d	1d-2d:	3d
Native Hawaiian or other Pacific Islander	White	1e	2e	1e-2e:	3e
Two or more races	White	1f	2f	1f-2f:	3f
Students with Disabilities	Students without Disabilities	1g	2g	1g-2g:	3g
Economically Disadvantaged	Not Economically Disadvantaged	1h	2h	1h-2h:	3h
English Learner	English Proficient	1i	2i	1i-2i:	3i
"All 3" Supergroup	Not in "All 3" Supergroup	1j	2j	1j-2j:	3j
"SwD-ECD" Supergroup	Not in "SwD-ECD" Supergroup	1k	2k	1k-2k:	3k
"SwD-EL" Supergroup	Not in "SwD-EL" Supergroup	1l	2l	1l-2l:	3l
"ECD-EL" Supergroup	Not in "ECD-EL" Supergroup	1m	2m	1m-2m:	3m

Step 2: Determine the Closing Graduation Gaps – Four Year Score

(4a) Count number of non-blank Difference in Rate of Change values
(in Step 1: 3a, 3b, 3c, 3d, 3e, 3f, 3g, 3h, 3i, 3j, 3k, 3l, 3m) 4a

(4b) Sum the Change Scores
(from Step 1: 3a+3b+3c+3d+3e+3f+3g+3h+3i+3j+3k+3l+3m) 4b

(4c) Determine the Average Change Score (4b/4a) 4c

(4d) Does the school have Closing Achievement Gaps data? 4d ☐ Yes ☐ No

(4e) If 4d is "Yes," enter 50; if "No," enter 100: 4e

(4f) Does the school have Closing Graduation Gaps - Six Year data? 4f ☐ Yes ☐ No

Possible Points (4g): If 4f is "Yes", multiply 4e by 0.5; if "No", multiply by 1 4g

(4h) Enter Average Change Score from 4c: 4h

(4i) Multiply 4h by 2.82: 4i

(4j) Add 4i to 0.55: 4j

(4k) Enter Possible Points from 4g: 4k

Step 3: Calculate the Difference in Rate of Change for the Six Year Rate for Each Target Group – Comparison Pair

Enter data from the Closing Graduation Gaps – Six Year "Rate of Change" columns under the "School Target Group" and "State Comparison Group" headings in the Report Card Detail table. If "NA" is given for a particular pair of target and comparison groups, leave the boxes blank for that pair.

Subtract the state comparison from the school target group in Points-Based Proficiency Rate to determine the difference in rate of change.

		Rate of Change			
School Target Group	State Comparison Group	School Target Group	State Comparison Group		Difference in Rate of Change
American Indian or Alaskan Native	White	5a	6a	5a-6a:	7a
Asian	White	5b	6b	5b-6b:	7b
Black or African American	White	5c	6c	5c-6c:	7c
Hispanic/Latino	White	5d	6d	5d-6d:	7d
Native Hawaiian or other Pacific Islander	White	5e	6e	5e-6e:	7e
Two or more races	White	5f	6f	5f-6f:	7f
Students with Disabilities	Students without Disabilities	5g	6g	5g-6g:	7g
Economically Disadvantaged	Not Economically Disadvantaged	5h	6h	5h-6h:	7h
English Learner	English Proficient	5i	6i	5i-6i:	7i
"All 3" Supergroup	Not in "All 3" Supergroup	5j	6j	5j-6j:	7j
"SwD-ECD" Supergroup	Not in "SwD-ECD" Supergroup	5k	6k	5k-6k:	7k
"SwD-EL" Supergroup	Not in "SwD-EL" Supergroup	5l	6l	5l-6l:	7l
"ECD-EL" Supergroup	Not in "ECD-EL" Supergroup	5m	6m	5m-6m:	7m

(4l) Closing Graduation Gaps – Four Year Score: Multiply 4j and 4k: **4l**

Step 4: Determine the Closing Graduation Gaps – Six Year Score

(8a) Count number of non-blank Difference in Rate of Change values (in Step 3: 7a, 7b, 7c, 7d, 7e, 7f, 7g, 7h, 7i, 7j, 7k, 7l, 7m) — 8a

(8b) Sum the Change Scores (from Step 3: 7a+7b+7c+7d+7e+7f+7g+7h+7i+7j+7k+7l+7m) — 8b

(8c) Determine the Average Change Score (8b/8a) — 8c

(8d) Does the school have Closing Achievement Gaps data? 8d ☐ Yes ☐ No

(8e) If 8d is "Yes," enter 50; if "No," enter 100: 8e

(8f) Does the school have Closing Graduation Gaps - Four Year data? 8f ☐ Yes ☐ No

Possible Points (8g): If 8f is "Yes", multiply 8e by 0.5; if "No", multiply by 1 — 8g

(8h) Enter Average Change Score from 8c: 8h

(8i) Multiply 8h by 2.82: 8i

(8j) Add 8i to 0.55:	8j
(8k) Enter Possible Points from 8g:	8k
(8l) Closing Graduation Gaps – Six Year Score: Multiply 8j and 8k:	**8l**

Step 5: Determine the Closing Graduation Gaps – Graduation Rate Gaps Score

(9a) Enter Closing Graduation Gaps – Four Year Score	9a
(9b) Enter Closing Graduation Gaps – Six Year Score	9b
Calculate Closing Graduation Gaps – Graduation Rate Gaps Score (9c): Add 9a and 9b	9c

Calculating Priority Area Scores
On-Track to Graduation and Postsecondary Readiness

The On-Track and Postsecondary Readiness Priority Area is designed to evaluate schools on how successfully students are achieving educational milestones that predict student success. It includes attendance, graduation, and student achievement at key transition points: 3rd grade English language arts and 8th grade mathematics.

Background

The mission of Wisconsin public schools is to ensure that every student becomes a high school graduate ready for college and career. The process of getting a student to graduation begins well before 12th grade, and there are key indicators throughout elementary, middle, and high school that have a direct impact on a student's likelihood of future success. This Priority Area is designed to hold schools accountable for a number of these key indicators.

A graduation/attendance component makes up the bulk of this Priority Area's score. Schools that graduate students are held accountable for graduation rates, and all other schools are held accountable for attendance rates.

- **Attendance** drives all aspects of student success throughout their school career.
- **Graduation rate** measures the outcome of our schools' overarching mission and is calculated as a cohort rate—the percentage of students starting high school together who graduate within a certain time.

District and school calculations differ

In the On-Track and Postsecondary Readiness Priority Area, schools are only held accountable for *either* graduation rate (when available) or attendance (when graduation rate is not available).

By comparison, for district report cards, districts that graduate students are held accountable for *both* graduation rates and attendance rates; districts that do not graduate students are held accountable for attendance rates only. See On-Track Walkthrough #3 for an example.

Attendance data and graduation data have some similarities. Both are lagged indicators, in that data for the 2018-19 report card are not yet available. As such, we report on the 2017-18 data. Additionally, attendance and graduation track each other fairly closely and have similar, narrow distributions of high rates. That is, the state average is around 90% to 95% for both attendance and graduation.

Note that because these graduation rates require four and six years of data, respectively, to calculate, graduation rates cannot yet be calculated for Choice schools. Therefore, both the Private School – Choice Students and Private School – All Students Report Cards will not have Graduation Rate component scores within the On-Track Priority Area but will have scores for the Attendance Rate component.

Other On-Track measures may also contribute to a school's Priority Area score.

- **English language arts achievement in 3rd grade** and **mathematics achievement in 8th grade** are measures that strongly predict future success as students move into middle school and high school.

Due to the diversity of school types in Wisconsin, not all of these On-Track measures apply to every school. Combining the measures into a Priority Area score in a way that treats all schools fairly, regardless of grade span, is necessary but is also complex.

Reading the Report Card Detail

Attendance

The first table shown in the On-Track and Postsecondary Readiness detail is the attendance rate, the number of days that students actually attended (days in seat) divided by the number of days they could possibly have attended (days enrolled). Only students in kindergarten through 12th grade are included in attendance calculations. Data are presented for all students and the lowest-attending student group,[4] which are averaged to determine the attendance score.

Supergroups are used when individual student groups are too small to be measured individually; see Closing Gaps for a description of supergroups.

Group	Enrollment	Attended Days	Possible Days	Rate
All Students	248	42,199.0	43,830.0	96.3%
Lowest Group: Students with Disabilities	32	5,195.5	5,604.5	92.7%

Attendance scores are reported out of 80 maximum points when other On-Track and Postsecondary Readiness components are available, and out of 100 when no other components are available. Because attendance rates are high statewide, attendance scores are always taken out of 80 when combining On-Track and Postsecondary Readiness scores with other Priority Areas, to ensure an equitable calculation for all schools regardless of their grade configuration or the data they have.

District and school calculations differ

For district report cards for districts with both graduation and attendance data, attendance scores and graduation scores are each taken out of 40 maximum points, rather than 80 points.

Graduation

The next table shows graduation rate information:

Group	Four-Year Cohort Graduation Rate			Six-Year Cohort Graduation Rate		
	Students in Cohort	Graduates	Rate	Students in Cohort	Graduates	Rate
All Students	311	255	82.0%	328	299	91.2%

Graduation rates are given for a cohort of students comprising the high school students who make up a particular four-year graduating class based on 9th grade entry and do not transfer to a private school that is not in the Choice program, move to another state or country, or are deceased. We report two graduation rates:

- The four-year cohort graduation rate is the percentage of students in the cohort at the end of the fourth year who graduated from high school.
- The six-year cohort graduation rate is the percentage of students in the cohort at the end of the sixth year (e.g. at the end of 2017-18 for the 2015-16 cohort) who graduated from high school.

[4] The lowest attending subgroup can be one of the school target groups listed in the Closing Gaps Priority Area or the white students subgroup.

This "extended" rate is used to include most students who require more than four years to finish high school.

Graduation scores are reported out of 80 maximum points when other On-Track and Postsecondary Readiness components are available, and out of 100 when no other components are available. Because graduation rates are high statewide, graduation scores are always taken out of 80 when combining On-Track and Postsecondary Readiness scores with other Priority Areas, to ensure an equitable calculation for all schools regardless of their grade configuration or the data they have.

4-year graduation rates for Choice schools will be calculated beginning with the 2019-20 Report Card. Thus, 4-year and 6-year Graduation Rate scores will be "NA" on both versions of the Private School report cards.

3rd Grade English Language Arts/8th Grade Mathematics Achievement

The final two tables in the On-Track and Postsecondary Readiness detail give information on English language arts achievement for 3rd grade students and mathematics achievement for 8th grade students. These tables are presented in the same format as Student Achievement, as described in that section of this guide.

The difference between this specific measure and other parts of the report card is in how cell size (the minimum number of students with data necessary to calculate a score) is used. In most places, we use a cell size of 20 in the most recent year, but applying this to a single grade would omit a large number of small elementary schools. Instead, for this measure only, we use a cell size of 20 over the two most recent years. This change affects only whether data is presented on the report card and used to determine a score, not the process by which the score is calculated.

Combining Individual Components into a Priority Area Score

The graduation/attendance component of On-Track, which applies to every school, has a maximum score of 80 points. The other On-Track components add up to a possible maximum of 20 points. Because different components of the 'Other' On-Track components apply to different types of schools, the number of points possible for each one depends on what combination of them applies to a given school. If a school has only 3rd grade English language arts or only 8th grade mathematics scores available, then the component is worth 20 points; if a school has both 3rd grade English language arts and 8th grade mathematics data, each component is worth 10 points. This is specified in the following table:

3rd Grade English Language Arts =	20	if no 8th grade mathematics data are available
	10	if 8th grade mathematics data are available
8th Grade Mathematics =	20	if no 3rd grade English language arts data are available
	10	if 3rd grade English language arts data are available

On-Track Walkthrough #1

This walkthrough uses data on attendance and 3rd grade English language arts achievement to determine a score for Sample Elementary School.

Step 1: Calculate the Graduation/Attendance Score

Group	Enrollment	Attended Days	Possible Days	Rate
All Students	248	42,997.5	43,830.0	98.1%
Lowest Group: Hispanic Students	31	5,346.0	5,656.5	94.5%

This is an elementary school and does not graduate students, so its attendance rates are used to determine the graduation/attendance score.

First, calculate the attendance rate (expressed as a decimal, not a percentage) of the 'all students" group and the attendance rate of the lowest attending subgroup:

$$\text{Attendance Rate} = \frac{\text{\# of Attended Days}}{\text{\# of Possible Enrollment Days}}.$$

Then, calculate the graduation/attendance score out of 80 by averaging the attendance rates of the "all students" and lowest attending subgroups and multiplying by 80:

$$\text{Graduation/Attendance Score} = \frac{\text{All Students Rate} + \text{Lowest Group Rate}}{2} * 80$$

$$\text{Graduation/Attendance Score} = \frac{0.981 + 0.945}{2} * 80 = \mathbf{77.0}$$

Step 2: Calculate the 3rd Grade English Language Arts Achievement Score

Performance Level	Points Multiplier	2016-17			2017-18			2018-19		
		Students		Points	Students		Points	Students		Points
		Count	Percent		Count	Percent		Count	Percent	
Advanced	1.5	9	20.9%	13.5	10	22.7%	15	8	19.0%	12
Proficient	1	11	25.6%	11	14	31.8%	14	14	33.3%	14
Basic	0.5	10	23.3%	5	9	20.5%	4.5	11	26.2%	5.5
Below Basic	0	13	30.2%	0	11	25.0%	0	9	21.4%	0
Total Tested	-	43	100.0%	29.5	44	100.0%	33.5	42	100.0%	31.5

The method for calculating the 3rd grade English language arts and 8th grade mathematics achievement scores is the same as described in the Student Achievement walkthrough (starting on page 20), with the difference that the multiplier used in the final step varies depending on the number of possible points for this component. A simplified version of that walkthrough is presented here; for a detailed description, please the Student Achievement section of this guide.

Step 2A: Assign and Average Points

$$\text{Prior Year 2 Average} = 29.5/43 = \mathbf{0.686}$$

$$\text{Prior Year 1 Average} = 33.5/44 = \mathbf{0.761}$$

$$\text{Current Year Average} = 31.5/42 = \mathbf{0.750}$$

Step 2B: Calculate Annual Weights

$$\text{Prior Year 2 Weight} = 1 * \frac{\text{Prior Year 2 Students Tested}}{\text{Average Students Tested}} = 1 * \frac{43}{(43+44+42)/3} = \mathbf{1.000}$$

$$\text{Prior Year 1 Weight} = 1.25 * \frac{\text{Prior Year 1 Students Tested}}{\text{Average Students Tested}} = 1.25 * \frac{44}{(43+44+42)/3} = \mathbf{1.279}$$

$$\text{Current Year Weight} = 1.5 * \frac{\text{Current Year Students Tested}}{\text{Average Students Tested}} = 1.5 * \frac{42}{(43+44+42)/3} = \mathbf{1.465}$$

Step 2C: Combine Points and Weights

$$\text{Prior Year 2 Score} = \text{Prior Year 2 Avg.} * \text{Prior Year 2 Weight} = 0.686 * 1.000 = \mathbf{0.686}$$

$$\text{Prior Year 1 Score} = \text{Prior Year 1 Avg.} * \text{Prior Year 1 Weight} = 0.761 * 1.279 = \mathbf{0.973}$$

$$\text{Current Year Score} = \text{Current Year Avg.} * \text{Current Year Weight} = 0.750 * 1.465 = \mathbf{1.099}$$

Step 2D: Calculate Component Score

$$\text{Comp. Score} = \frac{\text{Prior Year 2 Score} + \text{Prior Year 1 Score} + \text{Current Year Score}}{\text{Prior Year 2 Weight} + \text{Prior Year 1 Weight} + \text{Current Year Weight}} * \text{Poss. Pts.}$$

Sample Elementary School only has a 3rd grade English language arts achievement component, so the number of possible points is 20:

$$\text{3rd Grade English Language Arts Achievement Score} = \frac{0.686 + 0.973 + 1.099}{1.000 + 1.279 + 1.465} * 20 = \mathbf{14.7}$$

Step 3: Determine the Total On-Track and Postsecondary Readiness Score

The total score for this Priority Area is the sum of all its components' scores:

Graduation/Attendance Score	77.0
+	
3rd Grade English Language Arts Achievement Score	14.7=
Total On-Track and Postsecondary Readiness Score	**91.7**

Sample Elementary School has an **On-Track and Postsecondary Readiness score of 91.7.**

On-Track Walkthrough #2

This walkthrough will use data on graduation, 8th grade mathematics achievement, and 3rd grade English language arts to determine a score for Sample K-12 School.

Step 1: Calculate the Graduation/Attendance Score

Attendance

Group	Enrollment	Attended Days	Possible Days	Rate
All Students	252	39288.0	42173.0	93.3%
Lowest Group: White Students	180	28063	32400	86.6%

Graduation

Group	Four-Year Cohort Graduation Rate			Six-Year Cohort Graduation Rate		
	Students in Cohort	Graduates	Rate	Students in Cohort	Graduates	Rate
All Students	21	18	85.7%	31	29	93.5%

Sample K-12 School graduates students, so we use graduation rates to determine this score. The graduation/attendance score is calculated as the average of the four-year cohort rate and the six-year cohort rate, weighted by the number of students in each cohort. The average is then multiplied by 80 to produce a score out of a maximum of 80 points:

$$\text{Graduation/Attendance score} = \frac{(\text{4-Year Rate} * \text{Students in 4-year cohort}) + (\text{6-Year Rate} * \text{Students in 6-year cohort})}{\text{Students in 4-year cohort} + \text{Students in 6-year cohort}}.$$

$$\text{Graduation/Attendance Score} = \frac{(.857 * 21) + (.935 * 31)}{21 + 31} * 80 = \mathbf{72.3}$$

Step 2: Calculate the 8th Grade Mathematics Achievement Score

Performance Level	Points Multiplier	2016-17			2017-18			2018-19		
		Students			Students			Students		
		Count	Percent	Points	Count	Percent	Points	Count	Percent	Points
Advanced	1.5	4	21.1%	6	3	16.7%	4.5	3	14.3%	4.5
Proficient	1	6	31.6%	6	5	27.8%	5	7	33.3%	7
Basic	0.5	5	26.3%	2.5	6	33.3%	3	8	38.1%	4
Below Basic	0	4	21.1%	0	4	22.2%	0	3	14.3%	0
Total Tested	-	19	100.0%	14.5	18	100.0%	12.5	21	100.0%	15.5

Step 2A: Assign and Average Points

$$\text{Prior Year 2 Average} = 14.5/19 = \mathbf{0.763}$$

$$\text{Prior Year 1 Average} = 12.5/18 = \mathbf{0.694}$$

$$\text{Current Year Average} = 15.5/21 = \mathbf{0.738}$$

Step 2B: Calculate Annual Weights

$$\text{Prior Year 2 Weight} = 1 * \frac{19}{(19+18+21)/3} = \mathbf{0.983}$$

$$\text{Prior Year 1 Weight} = 1.25 * \frac{18}{(19+18+21)/3} = \mathbf{1.164}$$

$$\text{Current Year Weight} = 1.5 * \frac{21}{(19+18+21)/3} = \mathbf{1.629}$$

Step 2C: Combine Points and Weights

$$\text{Prior Year 2 Score} = 0.763 * 0.983 = \mathbf{0.750}$$

$$\text{Prior Year 1 Score} = 0.694 * 1.164 = \mathbf{0.808}$$

$$\text{Current Year Score} = 0.738 * 1.629 = \mathbf{1.202}$$

Step 2D: Calculate Component Score

With 3rd grade English language arts achievement present for the school, the possible score for this component is 10 points:

$$\text{8th Grade Mathematics Achievement Score} = \frac{0.750 + 0.808 + 1.202}{0.983 + 1.164 + 1.629} * 10 = \mathbf{7.3}$$

Step 3: Calculate the 3rd Grade English Language Arts Achievement Score

Performance Level	Points Multiplier	2016-17			2017-18			2018-19		
		Students			Students			Students		
		Count	Percent	Points	Count	Percent	Points	Count	Percent	Points
Advanced	1.5	7	31.8%	10.5	3	17.6%	4.5	6	31.3%	9
Proficient	1	10	45.5%	10	8	47.1%	8	6	43.8%	6
Basic	0.5	3	13.6%	1.5	4	23.6%	2	3	18.8%	1.5
Below Basic	0	2	9.1%	0	2	11.8%	0	1	6.3%	0
Total Tested	-	22	100.0%	22	17	100.0%	14.5	16	100.0%	16.5

Step 3A: Assign and Average Points

$$\text{Prior Year 2 Average} = 22/22 = \mathbf{1.000}$$

$$\text{Prior Year 1 Average} = 14.5/17 = \mathbf{0.853}$$

$$\text{Current Year Average} = 16.5/16 > \mathbf{1.000}$$

Note: Remember that the average has a maximum value of one—the true average for the current year is 1.031 (16.5/16) but we use 1.000 in the calculation.

Step 3B: Calculate Annual Weights

$$\text{Prior Year 2 Weight} = 1 * \frac{22}{(22+17+16)/3} = \mathbf{1.200}$$

$$\text{Prior Year 1 Weight} = 1.25 * \frac{17}{(22+17+16)/3} = \mathbf{1.159}$$

$$\text{Current Year Weight} = 1.5 * \frac{16}{(22+17+16)/3} = \mathbf{1.309}$$

Step 3C: Combine Points and Weights

$$\text{Prior Year 2 Score} = 1.000 * 1.200 = \mathbf{1.200}$$

$$\text{Prior Year 1 Score} = 0.853 * 1.159 = \mathbf{0.989}$$

$$\text{Current Year Score} = 1.000 * 1.309 = \mathbf{1.309}$$

Step 3D: Calculate Component Score

With 8th grade mathematics achievement present for the school, the possible score for this component is 10 points:

$$\text{3rd Grade English Language Arts Achievement Score} = \frac{1.200+0.989+1.309}{1.200+1.159+1.309} * 10 = \mathbf{9.5}$$

Step 4: Determine the Total On-Track and Postsecondary Readiness Score

Graduation/Attendance Score		72.3
8th Grade Mathematics Achievement Score	+	7.3
3rd Grade ELA Achievement Score	+	9.5 =
Total On-Track and Postsecondary Readiness Score		**89.1**

Sample K-12 School has an **On-Track and Postsecondary Readiness score of 89.1.**

On-Track Walkthrough #3: District calculation

This walkthrough will use data on graduation, attendance, 8th grade mathematics achievement, and 3rd grade English language arts to determine a score for Sample K-12 **District**.

Step 1: Calculate the Graduation/Attendance Score

Attendance

Group	Enrollment	Attended Days	Possible Days	Rate
All Students	953	138,066.5	148,790.0	92.8%
Lowest Group: Students with Disabilities	108	15,548.0	16,982.0	91.6%

Graduation

Group	Four-Year Cohort Graduation Rate			Six-Year Cohort Graduation Rate		
	Students in Cohort	Graduates	Rate	Students in Cohort	Graduates	Rate
All Students	25	21	84.0%	*	*	*

Sample K-12 District is a **district** that graduates students, so we use both attendance and graduation rates to determine the Graduation/Attendance score. Data for the six-year cohort rate are redacted—presumably, the six-year cohort must not meet the cell size of 20. Therefore, the graduation/attendance score is based only on the attendance rate and the four-year cohort graduation rate. Because both graduation and attendance data are present, each is multiplied by the maximum score of 40 instead of 80.

$$\text{Graduation/Attendance Score} = \text{Graduation Score} + \text{Attendance Score}$$

$$\text{Attendance Score} = \frac{\text{All Student Rate} + \text{Lowest Group Rate}}{2} * 40$$

$$\text{Attendance Score} = \frac{0.928 + 0.916}{2} * 40 = \mathbf{36.9}$$

$$\text{Graduation Score} = \text{4-Year Cohort Rate} * 40$$

$$\text{Graduation Score} = 0.840 * 40 = \mathbf{33.6}$$

$$\text{Graduation/Attendance Score} = 33.6 + 36.9 = \mathbf{70.5}$$

Step 2: Calculate the 8th Grade Mathematics Achievement Score

Performance Level	Points Multiplier	2016-17			2017-18			2018-19		
		Students			Students			Students		
		Count	Percent	Points	Count	Percent	Points	Count	Percent	Points
Advanced	1.5	4	21.1%	6	3	16.7%	4.5	3	14.3%	4.5
Proficient	1	6	31.6%	6	5	27.8%	5	7	33.3%	7
Basic	0.5	5	26.3%	2.5	6	33.3%	3	8	38.1%	4
Below Basic	0	4	21.1%	0	4	22.2%	0	3	14.3%	0
Total Tested	-	19	100.0%	14.5	18	100.0%	12.5	21	100.0%	15.5

Step 2A: Assign and Average Points

$$\text{Prior Year 2 Average} = 14.5/19 = \mathbf{0.763}$$

$$\text{Prior Year 1 Average} = 12.5/18 = \mathbf{0.694}$$

$$\text{Current Year Average} = 15.5/21 = \mathbf{0.738}$$

Step 2B: Calculate Annual Weights

$$\text{Prior Year 2 Weight} = 1 * \frac{19}{(19+18+21)/3} = \mathbf{0.983}$$

$$\text{Prior Year 1 Weight} = 1.25 * \frac{18}{(19+18+21)/3} = \mathbf{1.164}$$

$$\text{Current Year Weight} = 1.5 * \frac{21}{(19+18+21)/3} = \mathbf{1.629}$$

Step 2C: Combine Points and Weights

$$\text{Prior Year 2 Score} = 0.763 * 0.983 = \mathbf{0.750}$$

$$\text{Prior Year 1 Score} = 0.694 * 1.164 = \mathbf{0.808}$$

$$\text{Current Year Score} = 0.738 * 1.629 = \mathbf{1.202}$$

Step 2D: Calculate Component Score

With 3rd grade English language arts achievement present for the school, the possible score for this component is 10 points:

$$\text{8th Grade Mathematics Achievement Score} = \frac{0.750 + 0.808 + 1.202}{0.983 + 1.164 + 1.629} * 10 = \mathbf{7.3}$$

Step 3: Calculate the 3rd Grade English Language Arts Achievement Score

Performance Level	Points Multiplier	2016-17			2017-18			2018-19		
		Students			Students			Students		
		Count	Percent	Points	Count	Percent	Points	Count	Percent	Points
Advanced	1.5	7	31.8%	10.5	3	17.6%	4.5	6	31.3%	9
Proficient	1	10	45.5%	10	8	47.1%	8	6	43.8%	6
Basic	0.5	3	13.6%	1.5	4	23.6%	2	3	18.8%	1.5
Below Basic	0	2	9.1%	0	2	11.8%	0	1	6.3%	0
Total Tested	-	22	100.0%	22	17	100.0%	14.5	16	100.0%	16.5

Step 3A: Assign and Average Points

$$\text{Prior Year 2 Average} = 22/22 = \mathbf{1.000}$$

$$\text{Prior Year 1 Average} = 14.5/17 = \mathbf{0.853}$$

$$\text{Current Year Average} = 16.5/16 > \mathbf{1.000}$$

Note: Remember that the average has a ceiling of one—the true average for the current year is 1.031 (16.5/16) but we use 1.000 in the calculation.

Step 3B: Calculate Annual Weights

$$\text{Prior Year 2 Weight} = 1 * \frac{22}{(22+17+16)/3} = \mathbf{1.200}$$

$$\text{Prior Year 1 Weight} = 1.25 * \frac{17}{(22+17+16)/3} = \mathbf{1.159}$$

$$\text{Current Year Weight} = 1.5 * \frac{16}{(22+17+16)/3} = \mathbf{1.309}$$

Step 3C: Combine Points and Weights

$$\text{Prior Year 2 Score} = 1.000 * 1.200 = \mathbf{1.200}$$

$$\text{Prior Year 1 Score} = 0.853 * 1.159 = \mathbf{0.989}$$

$$\text{Current Year Score} = 1.000 * 1.309 = \mathbf{1.309}$$

Step 3D: Calculate Component Score

With 8th grade mathematics achievement present for the school, the possible score for this component is 10 points:

$$\text{3rd Grade English Language Arts Achievement Score} = \frac{1.200+0.989+1.309}{1.200+1.159+1.309} * 10 = \mathbf{9.5}$$

Step 4: Determine the Total On-Track and Postsecondary Readiness Score

	Graduation/Attendance Score	70.5
	8th Grade Mathematics Achievement Score	7.3
+	3rd Grade English Language Arts Achievement Score	9.5
	Total On-Track and Postsecondary Readiness Score	87.3

Sample K-12 District has an On-Track and Postsecondary Readiness score of 87.3.

On-Track and Postsecondary Readiness Priority Area Worksheet

Introduction

This worksheet has four parts: Graduation/Attendance, 8th Grade Mathematics Achievement, and 3rd Grade English Language Arts Achievement. Each part requires you to copy data from the On-Track and Postsecondary Readiness detail pages of the school report card. Your school may not have data for every component—we only report data for components that have scores. **Note that the score calculated here may not exactly match the report card due to rounding**. The key in the Achievement section of this document may be used to help read the 8th grade mathematics/3rd grade English language arts tables.

Instructions

Complete the following worksheet only for the components of On-Track and Postsecondary Readiness that have data on your school's report card. Remember that either attendance or graduation—not both—is used to calculate that portion of the score, which is worth up to 80 points. Use this grid to determine the number of possible points for each of the other On-Track components:

Possible points for 'Other' On-Track components

3rd Grade English Language Arts =	20	if no 8th grade mathematics data are available
	10	if 8th grade mathematics data are available
8th Grade Mathematics =	20	if no 3rd grade English language arts data are available
	10	if 3rd grade English language arts data are available

Total the components calculated for your school in the space below to determine the total Priority Area score:

	Graduation/Attendance Score:	_____ out of 80 points
	8th Grade Mathematics Achievement Score:	_____ out of ____ points
+	**3rd Grade English Language Arts Achievement Score:**	_____ out of ____ points
	Total On-Track and Postsecondary Readiness Score:	_____ out of 100 points

Graduation/Attendance Worksheet

Calculate the Graduation/Attendance Score for a *School* (for School Report Card Calculations only)

(1a) Does the school have a reported graduation rate(s)? 1a ☐ Yes ☐ No

(1b) If 1a is "No," enter the attendance rate (in %):		1b
(1c) If 1a is "No," enter the lowest group attendance rate (in %):		1c
(1d) Add 1b and 1c:		1d
(1e) Divide 1d by 200:		1e
(1f) If 1a is "Yes," enter the 4-year cohort graduation rate (in %):	1f	
(1g) Enter the total number of students in the 4-year cohort:	1g	
(1h) Multiply 1f and 1g:	1h	
(1i) If 1a is "Yes," enter the 6-year cohort graduation rate (in %):	1i	
(1j) Enter the total number of students in the 6-year cohort:	1j	
(1k) Multiply 1i and 1 j:	1k	
(1l) Add 1h and 1k and divide by 100:		1l
(1m) Add 1g and 1j:		1m
(1n) Divide 1l by 1m:		1n
(1o) Enter whichever of 1e or 1n has a value:		1o
(1p) Graduation/Attendance Score: Multiply 1o by 80:		1p

Calculate the Graduation/Attendance Score for a *District* (for District Report Card Calculations only)

(1a) Does the district have a reported graduation rate(s)? 1a ☐ Yes ☐ No

(1b) Enter the attendance rate (in %):		1b
(1c) Enter the lowest group attendance rate (in %):		1c
(1d) Add 1b and 1c:		1d
(1e) Divide 1d by 200:		1e
(1f) If 1a is "Yes", enter 40; if 1a is "No", enter 80		1f
(1g) Multiply 1e and 1f		1g
(1h) If 1a is "Yes," enter the 4-year cohort graduation rate (in %):	1h	
(1i) Enter the total number of students in the 4-year cohort:	1i	
(1j) Multiply 1h and 1i:	1j	
(1k) If 1a is "Yes," enter the 6-year cohort graduation rate (in %):	1k	
(1l) Enter the total number of students in the 6-year cohort:	1l	
(1m) Multiply 1k and 1l:	1m	
(1n) Add 1j and 1m and divide by 100:		1n
(1o) Add 1i and 1l:		1o
(1p) Divide 1n by 1o:		1p
(1q) If 1a is "Yes" multiply 1p by 40; if 1a is "No" enter 0		1q
(1r) Graduation/Attendance Score: Add 1g and 1q		1r

8th Grade Mathematics Achievement Worksheet

Step 1: Assign and Average Points

If a year does not have data shown, leave that year's boxes blank.

Prior Year 2 Average

(1a) Total points earned (B) [1a]

(1b) Count of students tested (A) [1b]

(1c) Is 1a greater than 1b? 1c ☐ Yes ☐ No

(1d) Average: If 1c is "Yes," enter 1; if 1c is "No," divide 1a by 1b [1d]

Prior Year 1 Average

(1e) Total points earned (D) [1e]

(1f) Count of students tested (C) [1f]

(1g) Is 1e greater than 1f? 1g ☐ Yes ☐ No

(1h) Average: If 1g is "Yes," enter 1; if 1g is "No," divide 1e by 1f [1h]

Current Year Average

(1i) Total points earned (F) [1i]

(1j) Count of students tested (E) [1j]

(1k) Is 1i greater than 1j? 1k ☐ Yes ☐ No

(1l) Average: If 1k is "Yes," enter 1; if 1k is "No," divide 1i by 1j [1l]

Step 2: Calculate Annual Weights

Average Enrollment

(2a) Prior Year 2 count of students tested (A) – leave blank if not shown [2a]

(2b) Prior Year 1 count of students tested (C) – leave blank if not shown [2b]

(2c) Current Year count of students tested (E) [2c]

(2d) Add 2a through 2c [2d]

(2e) How many of 2a through 2c have values? [2e]

(2f) Average number tested: Divide 2d by 2e [2f]

Prior Year 2 Weight

(2g) Is 2a blank? 2g ☐ Yes ☐ No If "Yes," move on to the "Prior Year 1 Weight" section.

(2h) Enter the count from 2a [2h]

(2i) Enter the average from 2f [2i]

(2j) Prior Year 2 Weight: Divide 2h by 2i [2j]

Prior Year 1 Weight

(2k) Is 2b blank? 2k ☐ Yes ☐ No If "Yes," move on to the "Current Year Weight" section.

(2l) Enter the count from 2b [2l]

(2m) Enter the average from 2f [2m]

(2n) Divide 2l by 2m [2n]

(2o) If 2g is "Yes," enter 1; if 2g is "No," enter 1.25 [2o]

(2p) Prior Year 1 Weight: Multiply 2n by 2o [2p]

Current Year Weight

(2q) Are both 2a and 2b blank? 2q ☐ Yes ☐ No If "Yes," skip to 2u.

(2r) Enter the count from 2c [2r]

(2s) Enter the average from 2f [2s]

(2t) Divide 2r by 2s [2t]

(2u) If 2q is "Yes," enter 1; if 2q is "No," enter 1.5 — 2u
(2v) Current Year Weight: Multiply 2t by 2u — 2v

Step 3: Combine Points and Weights

If a year does not have data, leave that year's boxes blank.

Prior Year 2 Score

(3a) Enter the average from 1d — 3a
(3b) Enter the weight from 2j — 3b
(3c) Prior Year 2 Score: Multiply 3a by 3b — 3c

Prior Year 1 Score

(3d) Enter the average from 1h — 3d
(3e) Enter the weight from 2p — 3e
(3f) Prior Year 1 Score: Multiply 3d by 3e — 3f

Current Year Score

(3g) Enter the average from 1l — 3g
(3h) Enter the weight from 2v — 3h
(3i) Current Score: Multiply 3g by 3h — 3i

Step 4: Calculate Component Score

(4a) Enter the score from 3c — 4a
(4b) Enter the score from 3f — 4b
(4c) Enter the score from 3i — 4c
(4d) Add 4a through 4c — 4d
(4e) Enter the weight from 2j — 4e
(4f) Enter the weight from 2p — 4f
(4g) Enter the weight from 2v — 4g
(4h) Add 4e through 4g — 4h
(4i) Divide 4d by 4h — 4i
(4j) Enter the number of possible points — 4j
(4k) 8th Grade Mathematics Achievement Score: Multiply 4i by 4j — 4k

3rd Grade English Language Arts Achievement Worksheet

Step 1: Assign and Average Points

If a year does not have data shown, leave that year's boxes blank.

Prior Year 2 Average

(1a) Total points earned (B) — 1a
(1b) Count of students tested (A) — 1b
(1c) Is 1a greater than 1b? — 1c ☐ Yes ☐ No
(1d) Average: If 1c is "Yes," enter 1; if 1c is "No," divide 1a by 1b — 1d

Prior Year 1 Average

(1e) Total points earned (D) — 1e
(1f) Count of students tested (C) — 1f
(1g) Is 1e greater than 1f? — 1g ☐ Yes ☐ No
(1h) Average: If 1g is "Yes," enter 1; if 1g is "No," divide 1e by 1f — 1h

Current Year Average

(1i) Total points earned (F) — 1i
(1j) Count of students tested (E) — 1j
(1k) Is 1i greater than 1j? — 1k ☐ Yes ☐ No
(1l) Average: If 1k is "Yes," enter 1; if 1k is "No," divide 1i by 1j — 1l

Step 2: Calculate Annual Weights

Average Enrollment

(2a) Prior Year 2 count of students tested (A) – leave blank if not shown [2a]

(2b) Prior Year 1 count of students tested (C) – leave blank if not shown [2b]

(2c) Current Year count of students tested (E) [2c]

(2d) Add 2a through 2c [2d]

(2e) How many of 2a through 2c have values? [2e]

(2f) Average number tested: Divide 2d by 2e [2f]

Prior Year 2 Weight

(2g) Is 2a blank? 2g ☐ Yes ☐ No If "Yes," move on to the "Prior Year 1 Weight" section.

(2h) Enter the count from 2a [2h]

(2i) Enter the average from 2f [2i]

(2j) Prior Year 2 Weight: Divide 2h by 2i [2j]

Prior Year 1 Weight

(2k) Is 2b blank? 2k ☐ Yes ☐ No If "Yes," move on to the "Current Year Weight" section.

(2l) Enter the count from 2b [2l]

(2m) Enter the average from 2f [2m]

(2n) Divide 2l by 2m [2n]

(2o) If 2g is "Yes," enter 1; if 2g is "No," enter 1.25 [2o]

(2p) Prior Year 1 Weight: Multiply 2n by 2o [2p]

Current Year Weight

(2q) Are both 2a and 2b blank? 2q ☐ Yes ☐ No If "Yes," skip to 2u.

(2r) Enter the count from 2c [2r]

(2s) Enter the average from 2f [2s]

(2t) Divide 2r by 2s [2t]

(2u) If 2q is "Yes," enter 1; if 2q is "No," enter 1.5 [2u]

(2v) Current Year Weight: Multiply 2t by 2u [2v]

Step 3: Combine Points and Weights

If a year does not have data, leave that year's boxes blank.

Prior Year 2 Score

(3a) Enter the average from 1d [3a]

(3b) Enter the weight from 2j [3b]

(3c) Prior Year 2 Score: Multiply 3a by 3b [3c]

Prior Year 1 Score

(3d) Enter the average from 1h [3d]

(3e) Enter the weight from 2p [3e]

(3f) Prior Year 1 Score: Multiply 3d by 3e [3f]

Current Year Score

(3g) Enter the average from 1l [3g]

(3h) Enter the weight from 2v [3h]

(3i) Current Score: Multiply 3g by 3h [3i]

Step 4: Calculate Component Score

(4a) Enter the score from 3c [4a]

(4b) Enter the score from 3f [4b]

(4c) Enter the score from 3i [4c]

(4e) Enter the weight from 2j [4e]

(4f) Enter the weight from 2p [4f]

(4g) Enter the weight from 2v [4g]

(4d) Add 4a through 4c	4d	(4h) Add 4e through 4g	4h
(4i) Divide 4d by 4h			4i
(4j) Enter the number of possible points			4j
(4k) 3rd Grade English Language Arts Achievement Score: Multiply 4i by 4j			4k

Calculating Student Engagement Indicator Deductions

Some measures in our school accountability system do not show a wide range of variation between schools but rather allow us to identify the small number of schools whose performance raises concern. Instead of including these measures within one of the Priority Areas, we place them into a separate category called Student Engagement Indicators. Failure to meet specific statewide goals for these indicators results in points being deducted from the school's weighted average Priority Areas score. The weighted average Priority Areas score minus any Student Engagement Indicator deductions equals the school's Overall Score.

The two Student Engagement Indicators are:

- **Absenteeism Rate:** Chronic absenteeism is a strong predictor of whether a student will struggle academically or fail to graduate. For this Student Engagement Indicator, **the school's absenteeism rate is equal to the percentage of its students who are chronically absent.** Chronically absent means a student missed school at least 16 percent of the time. **The goal for this Student Engagement Indicator is a school absenteeism rate of less than 13 percent**—that is, less than 13 percent of a school's students were chronically absent as measured by either a one-year or multi-year rate, whichever is more favorable. Only students in kindergarten through 12th grade are included in absenteeism calculations.

  If both of a school's single-year and multi-year absenteeism rates are 13 percent or more, the school's score is reduced by five points.

- **Dropout Rate:** Dropping out of school has a profound impact on a student's future success. **The goal for this Student Engagement Indicator is a dropout rate of less than 6 percent**.

  If a school has single-year and multi-year dropout rates of 6 percent or more, its school score is reduced by five points.

These deductions are summarized in the table below:

Student Engagement Indicator	Status	Deduction
Absenteeism	School absenteeism rate < 13%	None
	School absenteeism rate ≥ 13%	5 points
Dropout Rate	School dropout rate < 6%	None
	School dropout rate ≥ 6%	5 points

Each missed indicator results in a separate deduction from the weighted average Priority Areas score. For example, a school that misses the goals for absenteeism rate and dropout rate would be penalized 10 points.

The School Report Card Detail does not contain enough data to reproduce the exact calculations for the Student Engagement Indicators, so no worksheet is provided for these measures. Instead, this section will thoroughly detail the process by which each of the Student Engagement Indicators is calculated.

As a reminder, report card calculations (other than Percent Economically Disadvantaged) are rounded to the third decimal point (0.001, or 0.1%) and this rule applies to Absenteeism and Dropout rates. Please see table below for examples of how rounding to the third decimal point can impact whether a school receives a deduction:

Student Engagement Indicator	Example Unrounded Rate	Final Rate (Rounded to Third Decimal Point)	Deduction
Absenteeism	0.1295 or 12.95%	0.13 or 13%	5 points
	0.1294 or 12.94%	0.129 or 12.9%	None
Dropout Rate	0.0597 or 5.97%	0.06 or 6%	5 points
	0.0593 or 5.93%	0.059 or 5.9%	None

Absenteeism

Chronic absenteeism is highly correlated with low achievement and is a strong predictor of whether a student will struggle academically or fail to graduate. For this Student Engagement Indicator, the school's absenteeism rate is defined as the percentage of its students who are chronically absent. For the purposes of this indicator, chronically absent is defined as a student who misses school 16 percent of the time or more (has an individual attendance rate below 86 percent). The goal for this Student Engagement Indicator is a school absenteeism rate of less than 13 percent—that is, less than 13 percent of the school's students were chronically absent.

Remember that the attendance data used in absenteeism calculations are lagged by one year. As such, the "current year" calculations are based upon the most recent year of data available. In other words, absenteeism and attendance calculations for 2018-19 report cards are based on 2017-18 attendance data.

Whether a school meets the absenteeism rate goal is determined using the current year absenteeism rate or, when multi-year rate data are available, using both the current year and multi-year absenteeism rates. The multi-year absenteeism rate is calculated based on the number of years in which a school has at least 20 students enrolled in tested grades, up to a maximum of three years. For most schools, the multi-year absenteeism rate will be calculated using absenteeism data from the last three years; however, some schools' multi-year absenteeism rate will be calculated using the last two years. Schools in which there are at least 20 students enrolled in only the current year will use only the current year's absenteeism rate for determining whether the school met the goal.

Calculating Absenteeism Rate in the Current Year

To calculate your school's current year absenteeism rate, use the following steps:

1. Count the number of students who enrolled in your school for at least 45 days at any time during the prior school year. Due to data collection timelines, DPI must use the prior year's enrollment and attendance data to calculate the absenteeism rate.
2. For each individual student in Step 1, calculate that student's attendance rate. This is done by dividing the total number of days the student-attended school by the total number of possible days the student could have attended school. **Note that DPI does <u>not</u> have data on excused**

versus unexcused absences – it is the district's responsibility to ensure that attendance days are being recorded and reported in accordance with DPI guidelines.

$$\text{Individual Student Attendance Rate} = \frac{\text{Total Number of Days of Attendance}}{\text{Total Number of Possible Days of Attendance}}$$

3. Count the number of students whose attendance rate is 84.0% or below. These students are flagged as being chronically absent. Apply DPI rounding rules to round the attendance rate to the third decimal point – for example, an attendance rate of 84.05% would round up to 84.1%, and the student would not be flagged as chronically absent.
4. Divide the count of students flagged as chronically absent (Step 3) by the count of enrolled students (Step 1). This is the school's current year absenteeism rate.

$$\text{Current Year Absenteeism Rate} = \frac{\text{Number of Students Chronically Absent}}{\text{Number of Students Enrolled}}$$

Calculating Absenteeism Rate over Multiple Years

To calculate multi-year absenteeism rate, use the following steps:

1. Determine whether the multi-year absenteeism rate is calculated based on the last two or three years of attendance data. If at least 20 students were enrolled in your school for at least 45 days each of the last three years, use three years of data; if at least 20 students were enrolled in your school for at least 45 days in each of the last two years, but not in the third prior year, use two years of data. Due to data collection timelines, the prior year's data is the most recent data to be used when calculating the absenteeism rate.
2. Count the number of students who enrolled in your school for at least 45 days in a given year for each of the prior two or three years. For example, if a student was enrolled for 45 days in the current year and 45 days in the prior year that student would be considered separately for each year.
3. For each individual student in Step 2, calculate that student's attendance rate in each year. This is done by dividing the total number of days the student attended school in a given year by the total number of possible days the student could have attended school in that year.
4. Count the number of students whose attendance rate is 84.0% or below. Count each year that their attendance rate is 84.0% or below separately. For example, if a student's attendance rate was 84.0% or below in the current year and 84.0% or below in the prior year that student would be counted twice as being chronically absent. Apply traditional rounding rules to round the attendance rate to the third decimal point – for example, an attendance rate of 84.05% would round up to 84.1%, and the student would **not** be flagged as chronically absent.
5. Divide the count of students flagged as chronically absent (Step 4) by the total count of enrolled students across the prior two or three years (Step 2). This is the school's multi-year absenteeism rate.

$$\text{Current Year Absenteeism Rate} = \frac{\text{Number of Students Chronically Absent}}{\text{Number of Students Enrolled}}$$

Determining the Deduction

Once both the current year absenteeism rate and the multi-year absenteeism rate have been calculated, take the following steps:

1. If the school's current year absenteeism rate and the school's multi-year absenteeism rate are greater than or equal to 13%, five points will be deducted from the school's Overall Score.
2. If the school has only absenteeism data for the current year and the current year absenteeism rate is greater than or equal to 13%, five points will be deducted from the school's Overall Score.

Dropout

Dropping out of school severely limits a student's chances for success. The goal for this Student Engagement Indicator is a **dropout rate of less than 6 percent**.

The data used in dropout calculations are lagged by one year. As such, the "current year" calculations are based upon the most recent year of data available. In other words, dropout calculations for 2018-19 report cards are based on 2017-18 dropout data.

Whether a school meets the dropout rate goal is determined using the current year dropout rate or, when multi-year rate data are available, using both the current year and multi-year dropout rates. The multi-year dropout rate is calculated based on the number of years in which a school has at least 20 students enrolled in tested grades, up to a maximum of three years. For most schools, the multi-year dropout rate will be calculated using dropout data from the last three years; however, some schools' multi-year dropout rate will be calculated using the last two years. Schools in which there are at least 20 students enrolled in only the current year will use only the current year's dropout rate for determining whether the school met the goal. This indicator only considers dropout data for students in grades 7 through 12.

To calculate your school's dropout rate, use the following steps:

Calculating the Dropout Rate for the Current Year

1. Count the number of students who enrolled in your school who were in 7th grade or above in the prior year. Note that due to data collection timelines, the prior year's data must be used when calculating the dropout rate. In other words, for 2018-19 report cards, 2017-18 enrollment data are used.
2. Count the number of students who were in 7th grade or above who were considered to be either half-term or full-term dropouts.
3. Divide the count of total dropouts (determined in Step 2) by the count of total students (determined in Step 1). This is the school's current year dropout rate.

$$\text{Current Year Dropout Rate} = \frac{\text{Number of Dropouts}}{\text{Number of Students Enrolled}}$$

Calculating the Dropout Rate over Multiple Years

1. Count the number of students who enrolled in your school who were in 7th grade or above in the three prior years. Note that due to data collection timelines, the prior year's data is the most recent data to be used when calculating the dropout rate. For example, for 2018-19 report cards,

2017-18, 2016-17, and 2015-16 enrollment data are used to calculate the multi-year dropout rate.
2. Count the number of students who were considered to be either half-term or full-term dropouts in the three prior years.
3. Divide the count of total dropouts (determined in Step 2) by the count of total students (determined in Step 1). This is the school's multi-year dropout rate.

$$\text{Current Year Dropout Rate} = \frac{\text{Number of Dropouts}}{\text{Number of Students Enrolled}}$$

Determining the Deduction

After both the current year dropout rate and the multi-year dropout rate have been calculated, take the following steps:

1. If the dropout rate from Step 3 for both the Current Year and Multi-Year is 6% or above, a five point deduction will be taken from the school's Overall Score.
2. If the school has only dropout data for the current year and the current dropout rate is 6% or above, a five point deduction will be taken from the school's Overall Score.

Test Participation Supplemental Data

Test Participation was previously a Student Engagement Indicator, for which schools and districts could receive a deduction for having a test participation rate of less than 95 percent for the all student group and/or student groups. Test participation rates no longer affect scoring on the report cards; however, these data are still reported given their importance in highlighting educational inequities. As such, the current year test participation rate is provided as supplemental information alongside of the Student Engagement Indicators. Test participation rates for ELA and mathematics are provided by subgroup.

To calculate test participation for the current year, follow the steps below:

1. Count the total number of students enrolled in tested grades at test time in the current year. This should be done at the "All Students" level **and** for each group of students. If a student group has fewer than 20 students enrolled, a test participation rate cannot be calculated for that group, and the group is excluded from the test participation Student Engagement Indicator determination.

2. For groups with at least 20 enrolled students, count the total number of students who were assessed using either the general assessment (e.g., Forward, ACT) or the alternate assessment (e.g., DLM). This should be done at the "All Students" level **and** for each group of students. This step should be done separately for both math and ELA. For students for whom this was their first year in the country, participation in the ACCESS for English Learners test may be used in place of participation for the ELA assessment. To determine each group's current year participation rate, divide the number of students tested (the count from Step 2) by the number of students enrolled (the count from Step 1). This should be done at the "All Students" level, **and** for each group of students. This step should be done separately for both mathematics and English language arts.

3. Apply traditional rounding rules, rounding to the nearest whole number. For example, if a group had at least 20 students enrolled and its participation rate in mathematics was 94.8%, its participation rate in mathematics would round up to 95%, and the group would be considered to be meeting the goal.